THE GEOLOGICAL SURVEY OF WYOMING
Gary B. Glass, State Geologist

SELECTED BIBLIOGRAPHY ON SELENIUM

by
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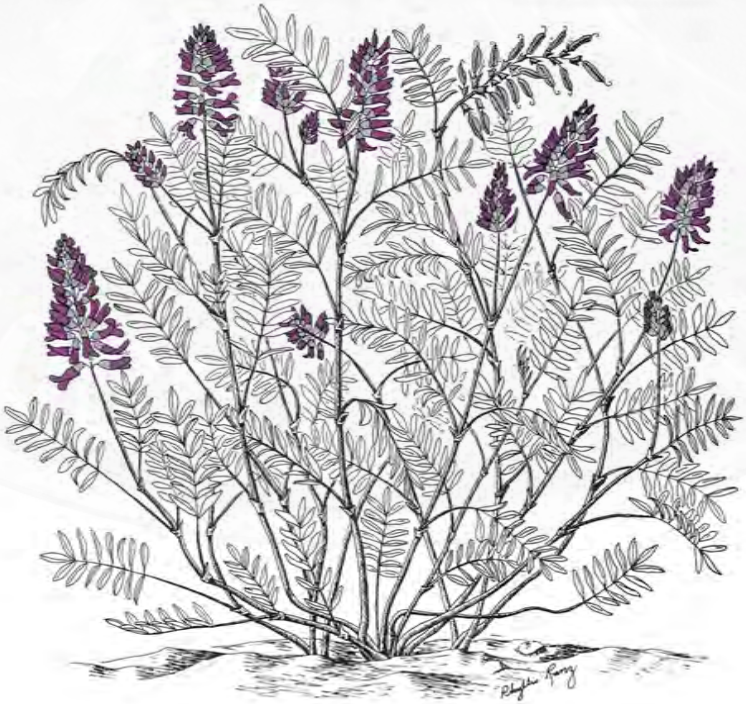
Rebecca L. Anderson, and Laura L. Larsen



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Cover: Certain plants in the Rocky Mountain states concentrate selenium to very high and in some cases toxic levels. *Astragalus bisulcatus*, (common name, two-grooved milk vetch) shown on the cover, is one of the primary plant concentrators. When it has accumulated high levels of selenium, it may emit a rotten garlic odor. (Drawing by Phyllis A. Ranz.)

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Introduction

Selenium toxicity has been of concern to states in the Western United States since the 1930s. Selenium deficiency has been of nationwide concern for a number of years also. In Wyoming, both toxic and deficient conditions have been identified. In 1987, a Governor's Task Force was created to investigate the status of selenium in Wyoming. In 1988, funding was made available from the Wyoming Water Research Center to acquire key literature on selenium for the use of the Task Force. In order to facilitate the use of the literature and assist selenium research in Wyoming, this bibliography and index have been generated.

Subtopics within the subject index are cross referenced within main topic categories. For example, listings for specific plant species are also listed under "Plants". "Plants" listings are included in the main topic "Soil and plant science". This bibliography does not include all bibliographic references for selenium. Selected references that apply to ongoing or needed research in Wyoming were given preference.

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AUTHORS AND TITLES

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Author/title listing

1. **Abu-Erreish, G.M., Whitehead, E.I., and Olson, O.E.,** 1968, Evolution of volatile selenium from soils: Soil Science, v. 106, no. 6, p. 415-420.

2. **Adams, W.J., and Johnson, H.E.,** 1981, Selenium: a hazard assessment and a water quality criterion calculation, *in* Branson, D.R., and Dickson, K.L., editors, Fourth Conference on Aquatic Toxicology and Hazard Assessment: American Society for Testing Materials (ASTM) Special Technical Paper 737, p. 124-137.

3. **Agemian, H., and Bedek, E.,** 1980, A semi-automated method for the determination of total arsenic and selenium in soils and sediments: Analytica Chimica Acta, v. 119, p. 323-330.

4. **Ahlrot-Westerlund, B., Plantin, L.O., Savic, I., Siden, A., and Svensson, J.,** 1987, Selenium in plasma, erythrocytes, and platelets from patients with multiple sclerosis, *in* Combs, G.F., Jr., Spallholz, J.E., Levander, O.A., and Oldfield, J.E., editors, Selenium in biology and medicine, part B, Proceedings of the Third International Symposium, Beijing, 1984: AVI, Van Nostrand Reinhold Company, New York, p. 981-984.

5. **Akesson, B., and Johansson, U.,** 1987, Selenium status in patients with liver cirrhosis, *in* Combs, G.F., Jr., Spallholz, J.E., Levander, O.A., and Oldfield, J.E., editors, Selenium in biology and medicine, part B, Proceedings of the Third International Symposium, Beijing, 1984: AVI, Van Nostrand Reinhold Company, New York, p. 968-975.

6. **Alcock, N.W.,** 1987, A simple rapid digestion method for tissue analysis of selenium and other trace metals, *in* Combs, G.F., Jr., Spallholz, J.E., Levander, O.A., and Oldfield, J.E., editors, Selenium in biology and medicine, part B, Proceedings of the Third International Symposium, Beijing, 1984: AVI, Van Nostrand Reinhold Company, New York, p. 559-565.

7. **Alfthan, G.,** 1986, Selenium status of nonpregnant, pregnant women, and neonates: Acta Pharmacologica et Toxicologica, v.59, p. 142-145.

8. **Allaway, W.H.,** 1973, Selenium in the food chain: The Cornell Veterinarian, v. 63, no. 2, p. 151-170.

9. **Allaway, W.H.,** 1975, Soil and plant aspects of the cycling of chromium, molybdenum and selenium, *in* International Conference on Heavy Metals in the Environment, Proceedings of the First Symposium, Toronto, Canada, October 27-31, 1975, v. 1, p. 35-47 [Electric Power Research Institute, and others, sponsors].

10. **Allaway, W.H., Kubota, J., Losee, F., and Roth, M.,** 1968, Selenium, molybdenum, and vanadium in human blood: Archives of Environmental Health, v. 16, p. 342-348.

11. **Allen, W.M., Drake, C.F., and Tripp, M.,** 1985, Use of controlled release systems for supplementation during trace element deficiency - the administration of boluses of controlled release glass (CRG) to cattle and sheep, *in* Mills, C.F., Bremner, I, and Chesters, J.K., editors, Trace elements in man and animals-5, Proceedings of the Fifth International Symposium on Trace Elements in Man and Animals: Commonwealth Agricultural Bureaux, Scotland, p. 719-722.

12. **Ames, B.N.,** 1986, Food constituents as a source of mutagens, carcinogens, and anticarcinogens, *in* Knudsen, I., editor, Genetic toxicity of the diet, progress in clinical and biological research v. 206: Proceedings of a Satellite Symposium of the Fourth International Conference on Environmental Mutagens, Copenhagen, Denmark, June 19-22, 1985: Alan R. Liss, Inc., New York, p. 3-32.

13. **Ammerman, C.B., and Henry, P.R.,** 1978, Current status of selenium for ruminants: Feedstuffs, v. 50, no. 11, p. 25-26.

14. **Ammerman, C.B., and Miller, S.M,** 1975, Selenium in ruminant nutrition: a review: Journal of Dairy Science, v. 58, no. 10, p. 1561-1577.

15. **Ammerman, C.B., Miller, S.M., Fick, K.R., and Hansard, S.L., II,** 1977, Contaminating elements in mineral supplements and their potential toxicity: a review: Journal of Animal Science, v. 44, no. 3, p. 485-508.

16. **Anderson, J.W.,and Scarf, A.R.,** 1983, Selenium and plant metabolism, *in* Robb, D.A., and Pierpoint, W.S., editors, Metals and micronutrients: uptake and utilization by plants, Annual Proceedings of the Phytochemical Society of Europe, v. 21: Academic Press, New York, p. 241-275.

17. **Anderson, M.S., Lakin, H.W., Beeson, K.C., Smith, F.F., and Thacker, E.,** 1961, Selenium in agriculture: U.S. Department of Agriculture, Agriculture Handbook No. 200, 65 p.

18. **Andreesen, J.R.,** 1980, Role of selenium, molybdenum, and tungsten in anaerobes, *in* Gottschalk, G., Pfennig, N., and Werner, H., editors, Anaerobes and anaerobic infections, 12th International Congress of Microbiology, Munich, September 3-8, 1978: Gustav Fischer, Stuttgart and New York, p. 31-40.

19. **Angino, E.E., Grisafe, D.A. and Smith, S.M.,** 1988, Arsenic and selenium: potential pollution to ground water from fly ash leachates: Geological Society of America Abstracts with Programs, v. 22, no. 2, p. 90.

20. **Arena, J.M., and Drew, R.H.,** editors, Poisoning: toxicology, symptoms, treatments, 5th edition: Charles C. Thomas, Springfield, Illinois, p. 197-198.

21. **Arnaud, J., Imbault-Huart, V., Favier, A., Zagala, A., and Phelip, X.,** 1989, Selenium and other trace elements in patients with rheumatoid arthritis, *in* Neve, J., and Favier, A., editors, Selenium in medicine and biology, Proceedings of the Second International Congress on Trace Elements in Medicine and Biology, March, 1988, Avoriaz, France: Walter de Gruyter, Berlin and New York, p. 247-250.

22. **Aro, A., and Huttunen, J.K.,** 1989, Selenium supplementation in humans, *in* Neve, J., and Favier, A., editors, Selenium in medicine and biology, Proceedings of the Second International Congress on Trace Elements in Medicine and Biology, March, 1988, Avoriaz, France: Walter de Gruyter, Berlin and New York, p. 297-303.

23. **Arthur, J.R., and Morrice, P.C.,** 1985, The effects of selenium and vitamin E deficiencies on response of rats to iron injection, *in* Mills, C.F., Bremner, I, and Chesters, J.K., editors, Trace elements in man and animals-5, Proceedings of the Fifth International Symposium on Trace Elements in Man and Animals: Commonwealth Agricultural Bureaux, Scotland, p. 109-113.

24. **Bailey, E.M., Jr.,** 1988, The importance of diagnosing poisoning from plants, *in* James, L.F., Ralphs, M.H., and Nielsen, D.B., editors, The ecology and economic impact of poisonous plants on livestock production: Westview Press, Boulder and London, p. 337-346.

25. **Bainbridge, D., Wegrzyn, V., and Albasel, N.,** 1988, Selenium in California volume 1: history, chemistry, biology, uses, management: California State Water Resources Control Board, Sacramento, California, 119 p.

26. **Balthrop, J.E., and Braddon, S.A.,** 1985, Effects of selenium and methylmercury upon glutathione and glutathione-s-transferase in mice: Archives of Environmental Contamination and Toxicology, v. 14, p. 197-202.

27. **Barnosky, C.W.,** 1979, The selenium cycle: its pathways and implications: Geological Survey of Wyoming files (unpublished), 15 p.

28. **Baumann, P.C., and May, T.W.,** 1984, Selenium residues in fish from inland waters of the United States, *in* EPRI Report EA-3329, Research Project 1631, Workshop Proceedings: The effects of trace elements on aquatic ecosystems, prepared by Carolina Light and Power Company: Electric Power Research Institute, Palo Alto, California, p. 7-1 to 7-16.

29. **Baumgartner, W.A.,** 1979, Antioxidants, cancer, and the immune response, *in* Kharasch, N., editor, Trace metals in health and disease: Raven Press, New York, p. 287-305.

30. **Baumgartner, W. A., and Hill, V.A.,** 1982, Anomalous antioxidant effects in selenium- and vitamin E-deficient liver mitochondria: Biological Trace Element Research, v. 4, p. 303-317.

31. **Bayliss, P.A., Buchanan, B.E., Hancock, R.G.V., and Zlotkin, S.H.,** 1985, Tissue selenium accretion in premature and full-term human infants and children: Biological Trace Element Research, v. 7, p 55-61.

32. **Beath, O.A.,** 1939, The seleniferous Astragalus Osterhouth Jones: The American Journal of Botany, v. 26, no. 9, p. 729-730.

33. **Beath, O.A.,** 1959, Economic potential and botanical limitation of some selenium-bearing plants: University of Wyoming Agricultural Experiment Station Bulletin No. 360, 12 p.

34. **Beath, O.A.,** 1982, The story of selenium in Wyoming: University of Wyoming Agricultural Experiment Station Bulletin No. 774, 31 p.

35. **Beath, O.A., Draize, J.H., and Eppson, H.F.,** 1932, Three poisonous vetches: University of Wyoming Agricultural Experiment Station Bulletin No. 189, 23 p.

36. **Beath, O.A., and Eppson,** H.F., 1947, The form of selenium in some vegetation: University of Wyoming Agricultural Experiment Station Bulletin No. 278, 15 p.

37. **Beath, O.A., Eppson, H.F., and Gilbert, C.S.,** 1935, Selenium and other toxic minerals in soils and vegetation: University of Wyoming Agricultural Experiment Station Bulletin No. 206, 55 p.

38. **Beath, O.A., and Gilbert, C.S.,** 1936, Selenium bearing vegetation during Late Cretaceous time: Science, v. 84, no. 2187, p. 484-485.

39. **Beath, O.A., Gilbert, C.S., and Eppson, H.F.,** 1937, Selenium in soils and vegetation associated with rocks of Permian and Triassic age: American Journal of Botany, v. 24, no. 2, p. 96-101.

40. **Beath, O.A., Gilbert, C.S., and Eppson, H.F.,** 1939a, The use of indicator plants in locating seleniferous areas in western United States, I, General: American Journal of Botany, v. 26, no. 4, p. 257-269.

41. **Beath, O.A., Gilbert, C.S., and Eppson, H.F.,** 1939b, The use of indicator plants in locating seleniferous areas in western United States, II, Correlation studies by states: American Journal of Botany, v. 26, no. 5, p. 296-315.

42. **Beath, O.A., Gilbert, C.S., and Eppson, H.F.,** 1940, The use of indicator plants in locating seleniferous areas in western United States, III, Further studies: American Journal of Botany, v. 27, no. 7, p. 564-573.

43. **Beath, O.A., Gilbert, C.S., and Eppson, H.F., 1941**, The use of indicator plants in locating seleniferous areas in western United States, IV, Progress report: American Journal of Botany, v. 28, no. 10, p. 887-900.

44. **Beath, O.A., Hagner, A.F., and Gilbert, C.S., 1946**, Some rocks and soils of high selenium content: Geological Survey of Wyoming Bulletin 36, 23 p.

45. **Beeson, K.C., Forbes, A.L., Horvath, D.J., and Lowenstein, F.W., 1978**, Plants and foods of plant origin, *in* United States National Committee for Geochemistry, Subcommittee on the Geochemical Environment in Relation to Health and Disease, editors, Geochemistry of the environment, v. 3: National Academy of Sciences, Washington, D.C., p. 59-113.

46. **Behne, D., Bratter, P., Gawlik, D., Rosick, U., and Wolters, W., 1978**, Se-selenite tracer study in rats during pregnancy and lactation and a comparison with selenium metabolism, *in* Kirchgessner, M., editor, Trace element metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic of Germany: Institut fur Ernahrungsphysiologie, Technische Universitat Munchen, Freising-Weihenstephan, p. 444-448.

47. **Beijer, K., and Jernelov, A., 1978**, Ecological aspects of mercury-selenium interactions in the marine environment: Environmental Health Perspectives (EHP), v. 25, p. 43-45.

48. **Beliles, R.P., 1981**, Phosphorus, selenium, and tellurium, *in* Clayton, G.D., and Clayton, F.E., editors, Patty's industrial hygiene and toxicology, 3rd edition, v. 2A: John Wiley & Sons, Inc., New York, p. 2121-2140.

49. **Belitz, K., 1988**, Character and evolution of the ground- water flow system in the central part of the western San Joaquin Valley, California: U.S. Geological Survey Open File Report 87-573, 34 p.

50. **Bell, M.C, Bacon, J.A., Bratton, G. R., and Wilkinson, J.E., 1978**, Effects of dietary selenium and lead on selected tissues of chicks, *in* Kirchgessner, M., editor, Trace element metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic of Germany: Institut fur Ernahrungsphysiologie, Technishe Universitat Munchen, Freising-Weihenstephan, p. 604-607.

51. **Bem, E.M., 1981**, Determination of selenium in the environment and in biological material: Environmental Health Perspectives (EHP), v. 37, p. 183-200.

52. **Bennett, B.G., and Peterson, P.G., 1987**, Assessment of human exposure to environmental selenium, *in* Combs, G.F., Jr., Spallholz, J.E., Levander, O.A., and Oldfield, J.E., editors, Selenium in biology and medicine, part B, Proceedings of the Third International Symposium, Beijing, 1984: AVI, Van Nostrand Reinhold Company, New York, p. 608-618.

53. **Bennett, W.N., Brooks, A.S., and Boraas, M.E., 1986**, Selenium uptake and transfer in an aquatic food chain and its effects on fathead minnow larvae: Archives of Environmental Contamination and Toxicology, v. 15, p. 513-517.

54. **Berlin, M., 1978**, Interaction between selenium and inorganic mercury: Environmental Health Perspectives (EHP), v. 25, p. 67-69.

55. **Berman, E., 1980**, Selenium, *in* Berman, E., editor, Toxic metals and their analysis: Heyden, London, p. 183-190.

56. **Berry, F.J., 1986**, O, S, Se, and Te, *in* Annual Reports on the Progress of Chemistry, v. 83, section A: Inorganic chemistry: The Royal Society of Chemistry, Burlington House, London, p. 159-196.

57. **Bertram, P.E., and Brooks, A.S.**, 1986, Kinetics of accumulation of selenium from food and water by fathead minnows: Water Research, v. 20, no. 7, p. 877-884.

58. **Binnerts, W.T., and El Boushy, A.R.**, 1985, Evidence for biological activity of selenium in levels higher than 0.1 mg/kg in feed, *in* Mills, C.F., Bremner, I, and Chesters, J.K., editors, Trace elements in man and animals-5, Proceedings of the Fifth International Symposium on Trace Elements in Man and Animals: Commonwealth Agricultural Bureaux, Scotland, p. 120-123.

59. **Birge, W.J., Roberts, O.W., and Black, J.A.**, 1976, Toxicity of metal mixtures to chick embryos: Bulletin of Environmental Contamination and Toxicology, v. 16, no. 3, p. 314-318.

60. **Birkner, J.H.**, 1978, Selenium in aquatic organisms from seleniferous habitats: Ph.D. dissertation, Colorado State University, Fort Collins, Colorado, 121 p.

61. **Birt, D.F.**, 1986, Update on the effects of vitamins A, C, and E and selenium on carcinogenesis: Proceedings of the Society for Experimental Biology and Medicine, v. 183, no. 3, p. 311-320.

62. **Birt, D.F., Julius, A.D., Runice, C.E., and Sayed, S.**, 1983, Tolerance of diets deficient or excessive in selenium by Syrian hamsters: Annals of Nutrition and Metabolism, v. 27, p. 81-93.

63. **Bollard, E.G.**, 1983, Involvement of unusual elements in plant growth and nutrition, *in* Lauchli, A., and Bieleski, R.L., editors, Inorganic plant nutrition, Encyclopedia of plant physiology, new series, v. 15B: Springer-Verlag, New York, p. 695-744.

64. **Boon, D.Y.**, 1986, Potential selenium problems in Great Plains soils: Paper presented at the Special Symposium on Selenium, New Orleans, December, 2, 1986, (unpublished), 32 p.

65. **Bovee, E.C.**, 1978, Effects of heavy metals, especially selenium, vanadium, and zirconium on the movement, growth, and survival of certain animal aquatic life: Kansas Water Resources Research Institute Contribution 199, 26 p.

66. **Brady, P.S., and Ullrey, D.E.**, 1978, The influence of selenium and vitamin E on the erythrocyte glutathione peroxidase system of white-tailed deer (*Odocoileus virginianus*), *in* Kirchgessner, M., editor, Trace elements metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic Germany: Institut fur Ernahrungsphysiologie, Technische Universitat Munchen, Freising-Weihenstephan, p. 519-522.

67. **Brisdon, B.J., and Woolf, A.A.**, 1975, Halide complexes, *in* Gutmann, V., editor, MTP international review of science, main group elements groups VI and VII, Inorganic chemistry series 2, v. 3: University Park Press, Baltimore, p. 257-297.

68. **Brogden, R. E., Hutchinson, E. C., and Hillier, D. E.**, 1979, Availablity and quality of ground water, Southern Ute Indian Reservation, southwestern Colorado: U.S. Geological Survey Water Supply Paper 1576-J, 28 p.

69. **Brookins, D.G.**, 1988, Eh-pH diagrams for geochemistry: Springer-Verlag, New York and Berlin, 176 p.

70. **Brooks, A.S.**, 1984, Selenium in the environment: an old problem with new concerns, *in* Carolina Power and Light Company, compilers, Workshop Proceedings: the effects of trace elements on aquatic ecosystems, EPRI Report EA-3329, Research Project 1631: Electric Power Research Institute, Palo Alto, California, p. 2-1 to 2-17.

71. **Brown, J.M.M., and de Wet, P.J.**, 1962, A preliminary report on the occurrence of selenosis in South Africa and its possible role in the aetiology of tribulosis (geeldikkop), enzootic icterus

and some other disease conditions encountered in the Karoo areas: Onderstepoort Journal of Veterinary Research, v. 29, no. 1, p. 111-134.

72. **Brown, T.A., and Shrift, A.,** 1982, Selenium: toxicity and tolerance in higher plants: Biological Reviews of the Cambridge Philosophical Society, v. 57, no. 1, p. 59-84.

73. **Broyer, T.C., Johnson, C.M., and Huston, R.P.,** 1972a, Selenium and nutrition of *Astragalus*, I, Effects of selenite or selenate supply on growth and selenium content: Plant and Soil, v. 36, p. 635-649.

74. **Broyer, T.C., Johnson, C.M., and Huston, R.P.,** 1972b, Selenium and nutrition of *Astragalus*, II, Ionic sorption interactions among selenium, phosphate, and the macro- and micronutrient cations: Plant and Soil v. 36, p. 651-669.

75. **Broyer, T.C., Lee, D.C., and Asher, C.J.,** 1966, Selenium nutrition of green plants. Effect of selenite supply on growth and selenium content of alfalfa and subterranean clover: Plant Physiology, v. 41, p. 1425-1428.

76. **Bruce, A.,** 1984, Selenium in human nutrition and medicine, *in* Proceedings of the Third International Symposium on Industrial Uses of Selenium and Tellurium: Stockholm, Sweden, p. 555-569 [Selenium-Tellurium Development Association, Inc., sponsors].

77. **Buck, W.B., and Ewan, R.C.,** 1973, Toxicology and adverse effects of mineral imbalance: Clinical Toxicology, v. 6, no. 3, p. 459-485.

78. **Buckley, W.T., Strachan, G., and Puls, R.,** 1987, Copper and selenium supplementation to calves by means of a soluble glass bolus: Canadian Journal of Animal Science, v. 67, p. 877-881.

79. **Buell, D.N.,** 1983, Potential hazards of selenium as a chemopreventative agent: Seminars in Oncology, v. 10, no. 3, p. 311-321.

80. **Burk, R.F.,** 1976a, Selenium, *in* Nutrition Reviews, editors, Present knowledge in nutrition, 4th edition: Nutrition Foundation, Inc., New York, p. 310-316.

81. **Burk, R.F.,** 1976b, Selenium in man, *in* Prasad, A.S., and Oberleas, D., editors, Trace elements in human health and disease, v. 2: Essential and toxic elements: Academic Press, New York, p. 105-133.

82. Burk, R.F., 1976c, The significance of selenium levels in blood: Proceedings of the Symposium on Selenium-Tellurium in the Environment, University of Notre Dame, Indiana, p. 194-203 [Industrial Health Foundation, Inc., sponsors].

83. **Burk, R.F.,** 1983, Biological activity of selenium: Annual Review of Nutrition, v.3, p. 53-70.

84. **Butler, E.J.,** 1971, The role of trace elements in metabolic processes, *in* Bell, D.J., and Freeman, B. M., editors, Physiology and biochemistry of the domestic fowl, v. 1: Academic Press, New York, p. 397-426.

85. **Byers, H.G.,** 1935, Selenium occurrence in certain soils in the United States, with a discussion of related topics: U.S. Department of Agriculture Technical Bulletin 482, 47 p.

86. **Calabrese, E.J.,** 1980, Does nutritional status affect benzene induced toxicity and/or leukemia?: Medical Hypotheses, v. 6, no. 5, p. 535-544.

87. **Calabrese, E.J.**, 1987, Extrapolation from animal data, *in* Tardiff, R.G., and Rodricks, J.V., editors, Toxic substances and human risk: principles of data interpretation: Plenum Press, New York, p. 269-280.

88. **Campbell, A.D.**, 1984, Critical evaluation of analytical methods for the determination of trace elements in various matrixes, part I: The determination of selenium in biological materials and water: Pure and Applied Chemistry, v. 56, no. 5, p. 645-651.

89. **Cantor, A.H., Langevin, M.L., Noguchi, T., and Scott, M.L.**, 1975, Efficacy of selenium in selenium compounds and feedstuffs for prevention of pancreatic fibrosis in chicks: The Journal of Nutrition, v. 105, no. 1, p. 106-111.

90. **Cantor, A.H., Scott, M.L., and Noguchi, T.**, 1975, Biological availability of selenium in feedstuffs and selenium compounds for prevention of exudative diathesis in chicks: The Journal of Nutrition, v. 105, no. 1, p. 96-105.

91. **Capaul, E.G., Carcagno, A.R., and Deluca, L.**, 1989, Alterations in the semen quality and plasma enzymes in bulls. Relation with selenium deficiency, *in* Neve, J., and Favier, A., editors, Selenium in medicine and biology, Proceedings of the Second International Congress on Trace Elements in Medicine and Biology, March, 1988, Avoriaz, France: Walter de Gruyter, Berlin and New York, p. 377-379.

92. **Cappon, C.J., and Smith, J.C.**, 1981, Mercury and selenium content and chemical form in fish muscle: Archives of Environmental Contamination and Technology, v. 10, p. 305-319.

93. **Care, A.D., Anderson, P.J.B., Illingworth, D.V., Zervas, G., and Telfer, S.B.**, 1985, The effect of soluble-glass on the copper, cobalt, and selenium status of Suffolk Cross lambs, *in* Mills, C.F., Bremner, I., and Chesters, J.K., editors, Trace elements in man and animals, Proceedings of the Fifth International Symposium on Trace Elements in Man and Animals: Commonwealth Agricultural Bureaux, Scotland, p. 717-719.

94. **Carlos, G., Zervas, G., Driver, P.M., Anderson, P.J.B., Illingworth, D.V., Al-Tekrity, S.A., and Telfer, S.B.**, 1985, The effect of soluble-glass boluses on the copper, cobalt, and selenium status of Scottish Blackface ewes, *in* Mills, C.F., Bremner, I., and Chesters, J.K., editors, Trace elements in man and animals, Proceedings of the Fifth International Symposium on Trace Elements in Man and Animals: Commonwealth Agricultural Bureaux, Scotland, p. 714-716.

95. **Carlson, C.W., Guenthner, E., and Olson, O.E.**, 1969, Reproductive performance of chickens over a life cycle on purified diets with selenium and arsenic additions: Federation Proceedings, v. 28, p. 809 [abstract].

96. **Carlson, G.P.**, 1987, Factors modifying toxicity, *in* Tardiff, R.G., and Rodricks, J.V., editors, Toxic substances and human risk: principles of data interpretation: Plenum Press, New York, p. 47-76.

97. **Carolina Power and Light Company**, compiler, 1984, Workshop proceedings: the effects of trace elements on aquatic ecosystems: EPRI Report EA-3329, Research Project 1631, prepared by Carolina Power and Light Company for the Electric Power Research Institute, Palo Alto, California, 384 p.

98. **Carroll, K.K.**, 1986, Lipid oxidation and carcinogenisis, *in* Knudsen, I., editor, Genetic toxicology of the diet, progress in clinical and biological research, v. 206, Proceedings of a Satellite Symposium of the Fourth International Conference on Environmental Mutagens, Copenhagen, Denmark, June 19-22, 1985: Alan R. Liss, Inc., New York, p. 237-244.

99. **Carter, D.L., Robbins, C.W., and Brown, M.J.,** 1972, Effect of phosphorous fertilization on the selenium concentration in alfalfa (*Medicago sativa*): Soil Science Society of America Proceedings, v. 36, p. 624-628.

100. **Cary, E.E.,** 1981, Effect of selenium and cadmium additions to soil on their concentrations in lettuce and wheat: Agronomy Journal, v. 73, p. 703-706.

101. **Cary, E.E., and Gissel-Nielsen, G.,** 1973, Effect of fertilizer anions on the solubility of native and applied selenium in soil: Soil Science Society of America Proceedings, v. 37, no. 4, p. 590-592.

102. **Case, A.A.,** 1974, Toxicity of various chemical agents to sheep: Journal of the American Veterinary Medical Association, v. 164, no. 3, p. 277-283.

103. **Case, J.C., and Boyd, C.S.,** 1985, Preliminary report and map on potentially seleniferous areas in Wyoming: Geological Survey of Wyoming Open File Report 85-14, 10 p., scale 1:1,000,000.

104. **Case, J.C., and Cannia, J.C.,** 1988, Guide to potentially seleniferous areas in Wyoming: Geological Survey of Wyoming Open File Report 88-1, scale 1:1,000,000.

105. **Casey, C.E.,** 1988, Selenophilia: Proceedings of the Nutrition Society, v. 47, no. 1, p. 55-62.

106. **Cavell, R.G., and Sanger, A.R.,** 1972, Arsenic, *in* Addison, C.C., and Sowerby, D.B., editors, MTP international review of science, main group elements groups V and VI, Inorganic chemistry, series one, v. 2: University Park Press, Baltimore, p. 203-227.

107. **Challenger, F.,** 1978, Biosynthesis of organometallic and organometalloidal compounds, *in* Brinckman, F.E., and Bellama, J.M., editors, Organometals and organometalloids: occurrence and fate in the environment, ACS symposium series 82: American Chemical Society, Washington, D.C., p. 1-22.

108. **Chandra, R.K., and Dayton, D.H.,** 1982, Trace element regulation of immunity and infection: Nutrition Research, v. 2, no. 6, p. 721-733.

109. **Chao, T.T., and Sanzolone, R.F.,** 1989, Fractionation of soil selenium by sequential partial dissolution: Soil Science Society of America Journal, v. 53, p. 385-392.

110. **Chau, Y.K., and Wong, P.T.S.,** 1978, Occurrence of biological methylation of elements in the environment, *in* Brinckman, F.E., and Bellama, J.M., editors, Organometals and organometalloids: occurrence and fate in the environment, ACS symposium series 82: American Chemical Society, Washington, D.C., p. 39-53.

111. **Chau, Y.K., Wong, P.T.S., and Goulden, P.D.,** 1975, A gas chromatograph-atomic absorption spectrophotometer system for the determination of volatile alkyl lead and selenium compounds: International Conference on Heavy Metals in the Environment, Proceedings of the 1st Symposium, Toronto, Canada, October 27-31, 1975, v. 1, p. 295-302 [Electric Power Research Institute, and others, sponsors].

112. **Chau, Y.K., Wong, P.T.S., Silverberg, B.A., Luxon, P.L., and Bengert, G.A.,** 1976, Methylation of selenium in the aquatic environment: Science, v. 192, no. 4244, p. 1130-1131.

113. **Cheeke, P.R.,** 1976, Nutrition of the domestic rabbit: Laboratory Animal Science, v. 26, no. 4, p. 654-658.

114. **Cheng, K.L., and Johnson, R.A.,** 1978, Selenium and tellurium, *in* Boltz, D.F., and Howell, J.A., editors, Colorimetric determination of nonmetals: chemical analysis, v. 8, second edition: John Wiley & Sons, Inc., New York, p. 371-419.

115. **Clark, J.R., and Viets, J.G.,** 1981, Multielement extraction system for the determination of 18 trace elements in geochemical samples: Analytical Chemistry, v. 53, p. 61-65.

116. **Clark, L.C.,** 1985, The epidemiology of selenium and cancer: Federation Proceedings, v. 44, no. 9, p. 2584-2589.

117. **Clive, D.L.J.,** 1978, Modern organoselenium chemistry: Tetrahedron, v. 34, no. 8, p. 1049-1132.

118. **Coker, O.E., and Diplock, A.T.,** 1978, The influence of dietary vitamin E and selenium on the metabolism of selenium by rat liver, *in* Kirchgessner, M., editor, Trace element metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic of Germany: Institut fur Ernahrungsphysiologie, Technische Universitat Munchen, Freising-Weihenstephan, p. 89-92.

119. **Coles, L.E.,** 1974, Selenium, a review: Journal of the Association of Public Analysts, v. 12, no. 3, p. 68-72.

120. **Combs, G.F., Jr.,** 1982, The role of selenium in the nutrition of animals and man: Distillers Feed Research Council Proceedings, v. 37, p. 54-64.

121. **Combs, G.F., Jr., Barrows, S.A., and Swader, F.N.,** 1980, Biologic availability of selenium in corn grain produced on soil amended with fly ash: Journal of Agricultural and Food Chemistry, v. 28, p. 406-409.

122. **Combs, G.F., Jr., and Clark, L.C.,** 1985, Can dietary selenium modify cancer risk?: Nutrition Reviews, v. 43, no. 11, p. 325-331.

123. **Combs, G.F., Jr., and Combs, S.B.,** 1984, The nutritional biochemistry of selenium: Annual Review of Nutrition, v. 4, p. 257-280.

124. **Combs, G.F., Jr., and Combs, S.B.,** 1986, The role of selenium in nutrition: Academic Press, Inc., Orlando, 532 p.

125. **Combs, G.F., Jr., and Combs, S.B.,** 1987, Selenium effects on drug and foreign compound toxicity: Pharmacology and Therapeutics, v. 33, no. 2-3, p. 303-315.

126. **Combs, G.F., Jr., Noguchi, T., and Scott, M.L.,** 1975, Mechanisms of action of selenium and vitamin E in protection of biological membranes: Federation Proceedings, v. 34, no. 11., p. 2090-2095.

127. **Combs, G.F., Jr., Spallholz, J.E., Levander, O.A., and Oldfield, J.A.,** editors, 1987, Selenium in Biology and Medicine, Parts A and B: Proceedings of the Third International Symposium on Selenium in Biology and Medicine, 1984, Beijing: AVI, Van Nostrand Reinhold Co., New York, 1138 p.

128. **Cooke, T.D.,** 1985, Processes affecting selenium speciation in natural waters: a case study of the Kesterson Reservoir: M.S. thesis, University of California at Santa Cruz, 113 p.

129. **Cooke, T.D., and Bruland, K.W.,** 1987, Aquatic chemistry of selenium: evidence of biomethylation: Environmental Science and Technology, v. 21, p. 1241-1219.

130. **Cooper, W.C., Bennett, K.G., and Croxton, F.C.,** 1974, The history, occurrence, and properties of selenium, *in* Zingaro, R.A., and Cooper, W.C., editors, Selenium: Van Nostrand Reinhold Company, New York, p. 1-30.

131. **Cooper, W.C., and Glover, J.R.,** 1974, The toxicity of selenium and its compounds, *in* Zingaro, R.A., and Cooper, W.C., editors, Selenium: Van Nostrand Reinhold Company, New York, p. 654-674.

132. **Coppock, R.,** undated [circa 1987], Resources at risk: agricultural drainage in the San Joaquin Valley: v. 1 *of* a series on drainage issues, sponsored by the University of California Agricultural Issues Center, Davis, California, 13 p.

133. **Coppock, R.,** undated [circa 1988], Resources at risk in the San Joaquin Valley: selenium, human health, and irrigated agriculture: v. 2 *of* a series on drainage issues, sponsored by the University of California Agricultural Issues Center, Davis, California, 9 p.

134. **Corbin, D.R., and Barnard, W.M.,** 1976, Atomic absorption spectrophotometric determination of arsenic and selenium in water by hydride generation: Atomic Absorption Newsletter, v. 15, no. 5, p. 116-121.

135. **Cowan, C.E.,** 1988, Review of selenium thermodynamic data: EPRI Report EA-5655, Research Project 2020-3, prepared by Battelle, Pacific Northwest Laboratories for the Electric Power Research Institute, Palo Alto, California, 74 p.

136. **Crenshaw, G.L., and Lakin, H.W.,** 1974, A sensitive and rapid method for the determination of trace amounts of selenium in geologic materials: Journal of Research of the U.S. Geological Survey, v. 2, no. 4, p. 483-487.

137. **Crist, M.A.,** 1974, Selenium in waters in and adjacent to the Kendrick Project, Natrona County, Wyoming: U.S. Geological Survey Water-Supply Paper 2023, 39 p., scale 1:62,500.

138. **Crystal, R.G.,** 1973, Elemental selenium: structure and properties, *in* Klayman, D.L., and Gunther, W.H.H., editors, Organic selenium compounds: their chemistry and biology: John Wiley & Sons, Inc., New York, p. 13-27.

139. **Cunha, T.J.,** 1973, Need and value of selenium in animal feeding, *in* Northern Ohio Geological Society, editors: Fourth International Symposium on Salt, v. 1, p. 457-461.

140. **Cutter, G.A.,** 1985, Determination of selenium speciation in biogenic particles and sediments: Analytical Chemistry, v. 57, no. 14, p. 2951-2955.

141. **Cutter, G.A.,** 1986, Speciation of selenium and arsenic in natural waters and sediments, v. 1: Selenium speciation: EPRI Report EA-4641, v. 1, Research Project 2020-1, prepared by Old Dominion University for the Electric Power Research Institute, Palo Alto, California, 79 p.

142. **Dall'Aglio, M., Ghiara, E., and Proietti, W.,** 1978, New data on the hydrogeochemistry of selenium: Rendiconti Societa Italiana di Mineralogica e Petrologia, v. 34, no. 2, p. 591-604.

143. **Danscher, G.,** 1984a, Dynamic changes in the stainability of rat hippocampal mossy fiber boutons after local injection of sodium sulphide, sodium selenide, and sodium diethyldithiocarbamate, *in* Frederickson, C.J., Howell, G.A., and Kasarskis, E. J., editors, The Neurobiology of zinc, part B: Deficiency, toxicity, and pathology, Proceedings of a Satellite Symposium to the Annual Meeting of the Society for Neuroscience, Boston, Massachusetts, November 4-6, 1983: Alan R. Liss, Inc., New York, p. 177-191.

144. **Danscher, G.,** 1984b, Similarities and differences in the localization of metals in rat brains after treatment with sodium sulphide and sodium selenide, *in* Frederickson, C.J., Howell, G.A., and Kasarskis, E. J., editors, The neurobiology of zinc, part A: Physiochemistry, anatomy, and techniques, Proceedings of a Satellite Symposium to the Annual Meeting of the Society for

Neuroscience, held in Boston, Massachusetts, November 4-6, 1983: Alan R. Liss, Inc., New York, p. 229-242.

145. **Davidson, D.F.,** 1963, Selenium in some oxidized sandstone-type uranium deposits: U.S. Geological Survey Bulletin 1162-C, 33 p.

146. **Davidson, D.F., and Gulbrandsen, R.A.,** 1957, Selenium in the Phosphoria Formation in Idaho, Wyoming, Utah, and Montana: Bulletin of the Geological Society of America , v. 68, no. 12, part 2, p. 1714 [abstract].

147. **Davis, E.A., Maier, K.J., and Knight, A.W.,** 1988, The biological consequences of selenium in aquatic ecosystems: California Agriculture, January-February 1988, p. 18-29.

148. **Davila, J.C., Edds, G.T., Osuna, O., and Simpson, C.F.,** 1983, Modification of the effects of aflatoxin B1 and warfarin in young pigs given selenium: American Journal of Veterinary Research, v. 44, no. 10, p. 1877-1883.

149. **De Marco, C., and Di Girolamo, M.,** 1982, Biological utilization of some selenium- and sulfur-containing amino acids, *in* Bossa, F., Chiancone, E., Finazzi-Agro, A., and Strom, R., editors, Advances in experimental medicine and biology, v. 148: Structure and functional relationships in biochemical systems: Plenum Press, New York, p. 343-357.

150. **Desborough, G.A.,** 1977, Preliminary report on certain metals of potential economic interest in thin vanadium-rich zones in the Meade Peak Member of the Phosphoria Formation in Western Wyoming and Eastern Idaho: U.S. Geological Survey Open File Report 77-341, 27 p.

151. **Deverel, S.J., and Fujii, R.,** 1987, Processes affecting the distribution of selenium in shallow ground water of agricultural areas, western San Joaquin Valley, California: U.S. Geological Survey Open File Report 87-220, 14 p.

152. **Deverel, S.J., and Fujii, R.,** 1988, Processes affecting the distribution of selenium in shallow groundwater of agricultural areas, western San Joaquin Valley, California: Water Resources Research, v. 24, no. 4, p. 516-524.

153. **Deverel, S.J., Gilliom, R.J., Fujii, R., Izbicki, J.A., and Fields, J.C.,** 1984, Areal distribution of selenium and other inorganic constituents in shallow ground water of the San Luis drain service area, San Joaquin Valley, California: a preliminary study: U.S. Geological Survey Water-Resources Investigations Report 84-4319, 67 p.

154. **Deverel, S.J., and Millard, S.P.,** 1986, Distribution and mobility of selenium and other trace elements in shallow ground water of the western San Joaquin Valley, California. U.S. Geological Survey Open File Report 86-538, 67 p.

155. **Dilli, S., and Sutikno, I.,** 1984, Analysis of selenium at the ultra-trace level by gas chromatography: Journal of Chromatography, v. 300, no. 6, p. 265-302.

156. **Diplock, A.T.,** 1974, The nutritional and metabolic roles of selenium and vitamin E: Proceedings of the Nutrition Society, v. 33, no. 3, p. 315-322.

157. **Diplock, A.T.,** 1976, Metabolic aspects of selenium action and toxicity: CRC Critical Reviews in Toxicology, v. 4, no. 3, p. 271-329.

158. **Diplock, A.T.,** 1984, Biological effects of selenium and relationships with carcinogenesis: Toxicolgical and Environmental Chemistry, v. 8, no. 4, p. 305-311.

159. **Diplock, A.T.,** 1985, Ultra trace elements and selenium, *in* Chandra, R.K, editor, Trace elements in nutrition of children, Nestle Nutrition Workshop, series 8: Vevey/Raven Press, New York, p. 263-271.

160. **Diplock, A.T.,** 1986, Free radicals in medicine and the biological role of selenium, *in* Taylor, T.G., and Jenkins, N.K., editors, Proceedings of the 13th International Congress of Nutrition, 1985: J. Libbey, London, p. 585-589.

161. **Diplock, A.T.,** 1987a, Metabolic defenses against oxygen and xenobiotic toxicity: biochemical interrelationships, *in* Combs, G.F., Jr., Spallholz, J.E., Levander, O.A., and Oldfield, J.E., editors, Selenium in biology and medicine, part A, Proceedings of the Third International Symposium, Beijing, 1984: AVI, Van Nostrand Reinhold Company, New York, p. 90-103.

162. **Diplock, A.T.,** 1987b, Trace elements in human health with special reference to selenium: American Journal of Clinical Nutrition, v. 45, p. 1313-1322.

163. **Donaldson, W.E.,** 1985, Effects of dietary lead, cadmium, mercury, and selenium on fatty acid composition of blood serum and erythrocyte membranes from chicks: Biological Trace Element Research, v. 7, no. 4, p. 255-262.

164. **Doran, J.W.,** 1982, Microorganisms and the biological cycling of selenium: Advances in Microbial Ecology, v. 6, p. 1-32.

165. **Doran, J.W., and Alexander, M.,** 1977, Microbial transformations of selenium: Applied and Environmental Microbiology, v. 33, no. 1, p. 31-37.

166. **Dostal, K.,** 1975, Inorganic selenium chemistry, *in* Gutmann, V., editor, MTP international review of science, main group elements groups VI and VII, Inorganic chemistry series two, v. 3: University Park Press, Baltimore, p. 85-120.

167. **Downes, C.P., McAuliffe, C.A., and Winter, M.R.C.,** 1979, Selenium in biochemistry: Inorganic Perspectives in Biology and Medicine, v. 2, no. 3, p. 241-270.

168. **Doyle, J.J.,** 1979, Toxic and essential elements in bone - a review: Journal of Animal Science, v. 49, no. 2, p. 482-497.

169. **Doyle, J.J.,** and Pfander, W.H., 1975, Interactions of cadmium with copper, iron, zinc, and manganese in ovine tissues: The Journal of Nutrition, v. 105, no. 5, p. 559-606.

170. **Dreesen, D.R., Gladney, E.S. and Owens, J.W.,** 1979, Interlaboratory comparison of arsenic, molybdenum, and selenium analyses from uranium mill tailings: Journal of the Water Pollution Control Federation, v. 51, no. 10, p. 2447-2456.

171. **Ducloux, J.Ph., Ducloux, B., Frantz, P., and Vincent, V.,** 1977, Recording a selenium intoxication, review of the literature: Acta Pharmacologica et Toxicologica, v. 41, supplement 3, p. 427 [abstract].

172. **Ducos-Fonfrede, S., Clanet, F., and Delrez, E.,** 1989, Selenium content of the mineral water of La Roche Posay. Interest for dietary supplementation, *in* Neve, J., and Favier, A., editors, Selenium in medicine and biology, Proceedings of the Second International Congress on Trace Elements in Medicine and Biology, March, 1988, Avoriaz, France: Walter de Gruyter, Berlin and New York, p. 325-328.

173. **Dudley, H.C., and Miller, J.W.,** 1941, Toxicology of selenium, VI, Effects of subacute exposure to hydrogen selenide: Journal of Industrial Hygiene and Toxicology, v. 23, no. 10, p. 470-477.

174. **Earl, F.L., and Vish, T.J.**, 1978, Teratogenicity of heavy metals, *in* Oehme, F.W., editor, Toxicity of heavy metals in the environment, part 2: Marcel Dekker, Inc., New York, p. 617-639.

175. **Egan, D.A.**, 1966, Selenium in ruminant nutrition: Irish Veterinary Journal, v. 20, no. 10, p. 182-186.

176. **Eisler, R.**, 1985, Selenium hazards to fish, wildlife, and invertebrates: a synoptic review: U.S. Fish and Wildlife Service Biological Report 85 (1.5), Contaminant Hazard Reviews Report No. 5, 57 p.

177. **Ekermans, L.G., and Schneider, J.V.**, 1982, Selenium in livestock production: a review: Journal of the South African Veterinary Association, v. 53, no. 4, p. 223-228.

178. **El-Begearmi, M.M., and Combs, G.F., Jr.**, 1982, Dietary effects of selenite toxicity in the chick: Poultry Science, v. 61, p. 770-776.

179. **El-Begearmi, M.M., Ganther, H.E., and Sunde, M.L.**, 1982, Dietary interaction between methylmercury, selenium, arsenic and sulfur amino acids in Japanese quail: Poultry Science, v. 61, p. 272-279.

180. **El-Begearmi, M.M., Sunde, M.L., and Ganther, H.E.**, 1977, A mutual protective effect of mercury and selenium in Japanese quail: Poultry Science, v. 56, p. 313-322.

181. **Elinder, C.-G., Gerhardsson, L., and Oberdoerster, G.**, 1988, Biological monitoring of toxic metals - overview, *in* Clarkson, T.W., Friberg, L., Nordberg, G.F., and Sager, P.R., editors, Biological monitoring of toxic metals: Plenum Press, New York, p. 1-71.

182. **Elkin, E.M.**, 1982, Selenium and selenium compounds, *in* Kirk-Othmer encyclopedia of chemical technology, 3rd edition, v. 20: John Wiley & Sons, Inc., New York, p. 575-601.

183. **Ellis, M.M., Motley, H.L., Ellis, M.D., and Jones, R.O.**, 1937, Selenium poisoning in fishes: Proceedings of the Society for Experimental Biology and Medicine, v. 36, no. 4, p. 519-522.

184. **Elrashidi, M.A., Adriano, D.C., Workman, S.M., and Lindsay, W.L.**, 1987, Chemical equilibria of selenium in soils: a theoretical development: Soil Science, v. 144, no. 2, p. 141-152.

185. **Elsokkaro, I.H., and Olen, A.**, 1977, Determination of Se in Soils: Acta Agriculturae Scandinavica, v. 27, p. 285-288.

186. **Elson, C.M., and MacDonald, A.S.**, 1979, Determination of selenium in pyrite by an ion exchange-electrothermal atomic absorption spectrometric method: Analytica Chimica Acta, v. 110, p. 153-156.

187. **Everett, F.D., and Bauerle, L.C.**, 1957, Investigation of tuffs near Lysite, Wyoming, for selenium: U.S. Bureau of Mines Report of Investigations 5296, 30 p.

188. **Ewan, R.C.**, 1978, Toxicology and adverse effects of mineral imbalance with emphasis on selenium and other minerals, *in* Oehme, F.W., editor, Toxicity of heavy metals in the environment, part 1: Marcel Dekker, Inc., New York, p. 445-489.

189. **Ewers, G.R.**, 1977, Experimental hot water-rock interactions and their significance to natural hydrothermal systems in New Zealand: Geochimica et Cosmochimica Acta, v. 41, p. 143-150.

190. **Eybl, V., Sykora, J. and Mertl, F.**, 1984, Interactions of chelating agents and selenium or tellurium with heavy metals in animals: *in* Proceedings of the Third International Symposium

on Industrial Uses of Selenium and Tellurium, Stockholm, Sweden, p. 504-521 [Selenium-Tellurium Development Association, Inc., sponsors].

191. **Farkas, C.S.,** 1978, Importance of interactions between nutrients and environmental contaminants as a factor in experimental design in toxicological research: with emphasis on selenium and ascorbic acid: The Science of the Total Environment, v. 9, no. 2, p. 149-159.

192. **Fishbein, L.,** 1972, Natural non-nutrient substances in the food chain: The Science of the Total Environment, v. 1, no. 3, p. 211-244.

193. **Fishbein, L.,** 1977, Toxicology of selenium and tellurium, *in* Goyer, R.A., and Mehlman, M.A., editors, Toxicology of trace elements, v. 2 *of* Advances in modern toxicology: Hemisphere Publishing Corporation, Washington and London, p. 191-240.

194. **Fishbein, L.,** 1983, Environmental selenium and its significance: Fundamental and Applied Toxicology, v. 3, no. 5, p. 411-419.

195. **Fishbein, L.,** 1986, Perspectives on selenium anticarcinogenicity: Toxicological and Environmental Chemistry, v. 12, p. 1-30.

196. **Fishbein, L.,** 1987, Selenium, *in* Fishbein, L., Furst, A., and Mehlman, M.A., editors, Genotoxic and carcinogenic metals: environmental and occupational occurrence and exposure, v. 11 *of* Advances in modern environmental toxicology: Princeton Scientific Publishing Co., Inc., Princeton, New Jersey, p. 31-59.

197. **Fisher, G.L.,** 1979, Trace element interactions in carcinogenesis, *in* Kharasch, N., editor, Trace metals in health and disease: Raven Press, New York, p. 93-107.

198. **Fisher, S.E., Jr., Munshower, F.F., and Parady, Fred,** 1987, Selenium, *in* Williams, R.D., and Schuman, G.E., editors, Reclaiming mine soils and overburden in the Western United States: analytic parameters and procedures: Soil Conservation Sociey of America, Ankeny, Iowa, p. 109-133.

199. **Fishman, M.J., and Erdmann, D.E.,** 1979, Water analysis: Analytical Chemistry, v. 51, no. 5, p. 317R-341R.

200. **Fleming, G.A.,** 1980, Essential micronutrients II: Iodine and selenium, *in* Davies, B.E., editor, Applied soil trace elements: John Wiley & Sons, Inc., New York, p. 199-234.

201. **Flessel, C.P.,** 1979, Metals as mutagenic initiators of cancer, *in* Kharasch, N., editor, Trace metals in health and disease: Raven Press, New York, p. 109-122.

202. **Flohe, L., Gunzler, W.A., and Loschen, G.,** 1979, The glutathione peroxidase reaction: a key to understand the selenium requirement of mammals, *in* Kharasch, N., editor, Trace metals in health and disease: Raven Press, New York, p. 263-285.

203. **Forbes, R.M., and Erdman, J.W., Jr.,** 1983, Bioavailability of trace mineral elements: Annual Review of Nutrition: v. 3, p. 213-231.

204. **Franke, K.W., and Potter, V.R.,** 1935, A new toxicant occurring naturally in certain samples of plant foodstuffs: The Journal of Nutrition, v. 10, no. 2, p. 213-221.

205. **Fraser, C.M.,** editor, The Merck veterinary manual: a handbook of diagnosis, therapy, and disease prevention and control for the veterinarian: Merck and Co., Inc., Rahway, New Jersey, 1677 p.

206. **Friberg, L.,** 1988, The GESAMP evaluation of potentially harmful substances in fish and other seafood with special reference to carcinogenic substances: Aquatic Toxicology, v. 11, no. 3-4, p. 379-393.

207. **Frieden, E.,** 1984, A survey of the essential biochemical elements, *in* Frieden, E., editor, Biochemistry of the essential ultratrace elements: Plenum Press, New York and London, p. 1-15.

208. **Frost, D.V.,** 1970, Tolerances for arsenic and selenium: a psychodynamic problem: World Review of Pest Control, v. 9, no. 1, p. 6-28.

209. **Frost, D.V.,** 1972, Selenium accumulation in soils: discussion and reply: Geological Society of America Special Paper 140, p. 55-56.

210. **Frost, D.V.,** 1981, Selenium in biology and medicine: Feedstuffs, v. 53, no. 28, p. 23-24, and 26-27.

211. **Frost, D.V.,** 1984, Overview - selenium in biology: Proceedings of the Third International Symposium on Industrial Uses of Selenium and Tellurium, Stockholm, Sweden, p. 426-437 [Selenium-Tellurium Development Association, Inc., sponsors].

212. **Frost, D.V.,** 1987, Interrelationships of selenium and arsenic in biology, *in* Combs, G. F., Jr., Spallholz, J. E., Levander O. A., and Oldfield, J. E., editors, Selenium in biology and medicine, part A, Proceedings of the Third International Symposium, Beijing, 1984: AVI Book, Van Nostrand Reinhold Company, New York, p. 308-323.

213. **Frost, D.V., and Lish, P.M.,** 1975, Selenium in biology: Annual Review of Pharmacology, v. 15, p. 259-284.

214. **Fujii, R.,** Water-quality and sediment chemistry data of drain water and evaporation ponds from Tulare Lake Drainage District, Kings County, California, March 1985 to March 1986: U.S. Geological Survey Open File Report 87-700, 19 p.

215. **Fujii, R., Deverel, S.J., and Hatfield, D.B.,** 1987, Distribution of selenium in soils of agricultural fields, western San Joaquin Valley, California: U.S. Geological Survey Open File Report 87-467, 16 p.

216. **Ganapathy, S.N., Joyner, B.T., Sawyer, D.R., and Hafner, K.M.,** 1987, Selenium content of selected foods, *in* Kirchgessner, M., Trace element metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic of Germany: Institut fur Ernahrungsphysiologie, Technische Universitat Munchen, Freising-Weihenstephan, p. 322.

217. **Ganther, H.E.,** 1974, Biochemistry of selenium, *in* Zingaro, R.A., and Cooper, W.C., editors, Selenium: Van Nostrand-Reinhold, New York, p. 546-614.

218. **Ganther, H.E.,** 1978, Modification of methylmercury toxicity and metabolism by selenium and vitamin E: possible mechanisms: Environmental Health Perspectives, v. 25, p. 71-76.

219. **Ganther, H.E.,** 1979, Metabolism of hydrogen selenide and methylated selenides: Advances in Nutritional Research, v. 2, p. 107-128.

220. **Ganther, H.E.,** 1984, Selenium metabolism and function in man and animals, *in* Bratter, P., and Schramel, P., editors, Trace element analytical chemistry in medicine and biology, v. 3, Proceedings of the Third International Workshop, Neuherberg, Federal Republic of Germany, April, 1984: Walter de Gruyter, Berlin and New York, p. 3-24.

221. **Ganther, H.E.,** 1987, Chemistry and metabolism of selenium, *in* Combs, G. F., Jr., Spallholz, J. E., Levander O. A., and Oldfield, J. E., editors, Selenium in biology and medicine, part A, Proceedings of the Third International Symposium, Beijing, 1984: AVI Book, Van Nostrand Reinhold Company, New York, p. 53-65.

222. **Ganther, H.E., Hafeman, D.G., Lawrence, R.A., Serfass, R.E., and Hoekstra, W.G.,** 1976, Selenium and glutathione peroxidase in health and disease - a review, *in* Prasad, A.S., and Oberleas, D., editors, Trace elements in human health and disease, v. 2: Essential and toxic elements: Academic Press, New York, p. 165-234.

223. **Ganther, H.E., and Hsieh, H.S.,** 1974, Mechanisms for the conversion of selenite to selenides in mammalian tissues, *in* Hoekstra, W.G., Suttie, J.W., Ganther, H.E., and Mertz, W., editors, Trace element metabolism in animals-2, Proceedings of the Second International Symposium on Trace Element Metabolism in Animals, University of Wisconsin, Madison, Wisconsin: University Park Press, Baltimore, p. 339-353.

224. **Ganther, H.E., Prohaska, J.R., Oh, S.H., and Hoekstra, W.G.,** 1978, The labile nature of selenium in oxidized glutathione peroxidase, *in* Kirchgessner, M., Trace element metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic of Germany: Institut fur Ernahrungsphysiologie, Technische Universitat Munchen, Freising-Weihenstephan, p. 77-84.

225. **Garberg, P., and Hogberg, J.,** 1986, The role of selenium-oxygen interactions in selenium metabolism: Ambio, v. 15, no. 6, p. 354-355.

226. **Gardiner, M.R.,** 1969, Selenium in animal nutrition: Outlook on Agriculture, v. 6, p. 19-28.

227. **Gates, T.K., and Grismer, M.E.,** 1987, Optimal management of saline water tables in irrigated regions: California Agriculture, v. 41, no. 3-4, p. 20-21.

228. **Gatlin, D.M., III, and Wilson, R.P.,** 1984, Dietary selenium requirement of fingerling channel catfish: The Journal of Nutrition, v. 114, no. 3, p. 627-633.

229. **Gatti, G.L., Macri, A., and Silano, V.,** 1979, Biological and health effects of mercury, *in* Di Ferrante, E., editor, Trace metals: exposure and health effects, Proceedings of the research seminar held at the University of Surrey, Guildford, United Kingdom, 10-13 July, 1978: Pergamon Press, Oxford and New York, p. 73-98.

230. Gavrilovic, B., and Matesic, D., 1987, Importance of selenium quantity in soil and fodder in regard to the occurrence of some diseases in cattle, pigs, sheep, and poultry in Yugoslavia, *in* Combs, G. F., Jr., Spallholz, J. E., Levander O. A., and Oldfield, J. E., editors, Selenium in biology and medicine, part B, Proceedings of the Third International Symposium, Beijing, 1984: AVI Book, Van Nostrand Reinhold Company, New York, p. 740-749.

231. **Gent, C.A.,** 1976, Annotated biblography of the geology of selenium, 1958-1974: U.S. Geological Survey Bulletin 1419, 49p.

232. **Geohring, T.B., Palmer, I.S., Olson, O.E., Libal, G.W., and Wahlstrom, R.C.,** 1984, Toxic effects of selenium on growing swine fed corn-soybean meal diets: Journal of Animal Science, v. 59, no. 3, p. 733-737.

233. **George, J.W.,** 1972, Inorganic selenium chemistry, *in* Addison, C.C., and Sowerby, D.E., editors, MTP international review of science, main group elements groups V and VI, Inorganic chemistry series one, v. 2: University Park Press, Baltimore, p. 229-252.

234. **George, S.G.,** 1980, Correlation of metal accumulation in mussels with the mechanisms of uptake, metabolism and detoxification: a review: Thalassia Jugoslavica, v. 16, no. 2-4, p. 347-365.

235. **Gibson, R.S., and Scythes, C.A.,** 1982, Trace element intakes of women: British Journal of Nutrition, v. 48, no. 2, p. 241-248.

236. **Gillespie, R.J., and Passmore, J.,** 1975, Polyatomic cations of sulphur, selenium and tellurium, *in* Gutmann, V., editor, MTP international review of science, main group elements groups VI and VII, Inorganic chemistry series two, v. 3: University Park Press, Baltimore, p. 121-136.

237. **Girling, C.A.,** 1984, Selenium in agriculture and the environment: Agriculture, Ecosystems, and Environment, v. 11, no. 1, p. 37-65.

238. **Gissel-Nielsen, G.,** 1971, Influence of pH and texture of the soil on plant uptake of added selenium: Journal of Agricultural and Food Chemistry, v. 19, no. 6, p. 1165-1167.

239. **Gissel-Nielsen, G.,** 1973, Uptake and distribution of added selenite and selenate by barley and red clover as influenced by sulphur: Journal of the Science of Food and Agriculture, v. 24, p. 649-655.

240. **Gissel-Nielsen, G.,** 1976a, Selenium concentration in Danish forage crops: Proceedings of the Symposium on Selenium-Tellurium in the Environment, University of Notre Dame, Indiana, p. 216-220 [Industrial Health Foundation, Inc., sponsors].

241. **Gissel-Nielsen, G.,** 1976b, Selenium in soils and plants: Proceedings of the Symposium on Selenium-Tellurium in the Environment, University of Notre Dame, Indiana, p. 10-25 [Industrial Health Foundation, Inc., sponsors].

242. **Gissel-Nielsen, G.,** 1977, Control of selenium in plants: Riso Report no. 370, Agricultural Department, Riso National Laboratory, Roskilde, Denmark, 42 p.

243. **Gissel-Nielsen, G.,** 1984, Selenium in soils and plants: Proceedings of the Third International Symposium on Industrial Uses of Selenium and Tellurium: Stockholm, Sweden, p. 470-478 [Selenium-Tellurium Development Association, Inc., sponsors].

244. **Gissel-Nielsen, G.,** 1986, Comparision of selenium treatments of crops in the field: Biological Trace Element Research, v. 10, p. 209-213.

245. **Gissel-Nielsen, G.,** 1987, Selenium in the soil-plant system, *in* Combs, G. F., Jr., Spallholz, J. E., Levander O. A., and Oldfield, J. E., editors, Selenium in biology and medicine, part B, Proceedings of the Third International Symposium, Beijing, 1984: AVI Book, Van Nostrand Reinhold Company, New York, p. 775-782.

246. **Gissel-Nielsen, G.,** Gupta, U.C., Lamand, M., and Westermarck, T., 1984, Selenium in soils and plants and its importance in livestock and human nutrition: Advances in Agronomy, v. 37, p. 397-460.

247. **Gissel-Nielsen, G. and Hamdy, A.A.,** 1976, Plant uptake of selenium and LSe-values in different soils: Proceedings of the Symposium on Selenium-Tellurium in the Environment, University of Notre Dame, Indiana, p. 1-17 [Industrial Health Foundation, Inc., sponsors].

248. **Gissel-Nielsen, G., and Hamdy, A.A.,** 1977, Leaching of added selenium in soils low in native selenium: Zeitschrift Pflanzenernaehrung und Bodenkunde, v. 140, p. 193-198.

249. **Glover, J.R.**, 1976, Environmental health aspects of selenium and tellurium: Proceedings of the Symposium on Selenium-Tellurium in the Environment, University of Notre Dame, Indiana, p. 279-292 [Industrial Health Foundation, Inc., sponsors].

250. **Godwin, K.O.**, 1975, The role and the metabolism of selenium in the animal, *in* Nicholas, D.J.D., and Egan, A.R., editors, Trace elements in soil-plant-animal systems, Proceedings of the Jubilee Symposium of the Waite Agricultural Research Institute, Glen Osmond, South Australia, 1974: Academic Press, New York, p. 259-270.

251. **Godwin, K.O., Partick, E.J., and Fuss, C.N.**, 1978, Adverse effects of copper, and to a lesser extent iron, when administered to selenium-deficient rats, *in* Kirchgessner, M., editor, Trace element metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic of Germany: Institut fur Ernahrungsphysiologie, Technische Universitat Munchen, Freising-Weihenstephan, p. 185-187.

252. **Goede, A.A.**, 1989, Selenium in marine waders, *in* Neve, J., and Favier, A., editors, Selenium in medicine and biology, Proceedings of the Second International Congress on Trace Elements in Medicine and Biology, March, 1988, Avoriaz, France: Walter de Gruyter, Berlin and New York, p. 381-384.

253. **Goehring, T.B., Palmer, I.S., Olson, O.E., Libal, G.W., and Wahlstrom, R.C.**, 1984a, Effects of seleniferous grains and inorganic selenium on tissue and blood composition and growth performance of rats and swine: Journal of Animal Science, v. 59, no. 3, p. 725-732.

254. **Goehring, T.B., Palmer, I.S., Olson, O.E., Libal, G.W., and Wahlstrom, R.C.**, 1984b, Toxic effects of selenium on growing swine fed corn-soybean meal diets: Journal of Animal Science, v. 59, no. 3, p. 733-737.

255. **Goettsch, M.**, 1961, Failure of certain American yeasts and of selenium to prevent muscular distrophy in the young rat: The Journal of Nutrition, v. 74, no. 2, p. 161-166.

256. **Goihl, J.H.**, 1981, Young swine may need increased selenium: Feedstuffs, v. 53, no. 15, p. 14.

257. **Golden, M.H.N.**, 1982, Trace elements in human nutrition: Human Nutrition: Clinical Nutrition, v. 36C, no. 3, p. 185-202.

258. **Grandjean, P.**, 1973, Selenium, *in* Last, J.M., editor, Maxcy-Rosenau public health and preventative medicine, 11th edition: Appleton-Century-Crofts, New York, p. 678-679.

259. **Granger, H.C.**, 1966, Ferroselite in a roll-type uranium deposit, Powder River Basin, Wyoming: U.S. Geological Survey Professional Paper 550-C, p. C133-C137.

260. **Greger, J.L.**, 1987, Factors affecting selenium absorption, excretion, and retention by human subjects, *in* Combs, G. F., Jr., Spallholz, J. E., Levander O. A., and Oldfield, J. E., editors, Selenium in biology and medicine, part A, Proceedings of the Third International Symposium, Beijing, 1984: AVI Book, Van Nostrand Reinhold Company, New York, p. 419-425.

261. **Greger, J.L. and Lane, H.W.**, 1987, The toxicology of dietary tin, aluminum, and selenium, *in* Hathcock, J.N., editor, Nutritional toxicology, v. 2: Academic Press, Inc., Orlando, p. 223-247.

262. **Griffin, A.C.**, 1978, Role of selenium in the chemoprevention of cancer: Advances in Cancer Research, v. 29, p. 419-442.

263. **Groth, D.H., Stettler, L.E., and Mackay, G.R.**,1976, Interactions of mercury, selenium, tellurium, and arsenic: Proceedings of the Symposium on Selenium-Tellurium in the Environment, University of Notre Dame, Indiana, p. 85-103 [Industrial Health Foundation, Inc., sponsors].

264. **Gruebel, K.A., Davis, J.A., and Leckie, J.O.,** 1988, The feasibility of using sequential extraction techniques for arsenic and selenium in soils and sediments: Soil Science Society of America Journal, v. 52, p. 390-397.

265. **Gutenmann, W.H., Pakkala, I.S., Churey, D.J., Kelley, W.C., and Lisk, D.J.,** 1979, Arsenic, boron, molybdenum, and selenium in successive cuttings of forage crops field grown on fly ash amended soil: Journal of Agricultural and Food Chemistry, v. 27, no. 6, p. 1393-1395.

266. **Haddad, P.R., and Smythe, L.E.,** 1974, A critical evaluation of fluorometric methods for determination of selenium in plant materials with 2,3-diaminonaphthalene: Talanta v. 21, no. 8, p. 859-865.

267. **Hadjimarkos, D.M.,** 1973, Selenium and dental caries susceptibility: The Journal of Nutrition, v. 103, no. 11, p. 1634-1635.

268. **Hahn, M.H., Kuennen, R.W., Caruso, J.A., and Fricke, F.L.,** 1981, Determination of trace amounts of selenium in corn, lettuce, potatoes, soybeans, and wheat by hydride generation/ condensation and flame atomic absorption spectrometry: Journal of Agricultural and Food Chemistry, v. 29, p. 792-796.

269. **Halverson, A.W.,** 1974a, Growth and reproduction with rats fed selenite-Se: Proceedings of the South Dakota Academy of Science, v. 53, p. 167-177.

270. **Halverson, A.W.,** 1974b, Growth and reproduction with rats fed selenite-Se, *in* Hoekstra, W.G., Suttie, J.W., Ganther, H.E., and Mertz, W., editors, Trace element metabolism in animals-2, Proceedings of the Second International Symposium on Trace Element Metabolism in Animals, University of Wisconsin, Madison, Wisconsin: University Park Press, Baltimore, p. 587-89.

271. **Halverson, A.W., Jerde, L. G., and Hills, C.L.,** 1965, Toxicity of inorganic selenium salts to chick embryos: Toxicology and Applied Pharmacology, v. 7, no. 5, p. 675-679.

272. **Halverson, A.W., Palmer. I.S., and Guss, P.L.,** 1966, Toxicity of selenium to post-weanling rats: Toxicology and Applied Pharmacology, v. 9, no. 3, p. 477-484.

273. **Hamdy, A.A., and Gissel-Nielsen, G.,** 1976, Volatilization of selenium from soils: Zeitschrift fur Pflanzenernaehrung und Bodenkunde: v. 6, p. 671-678.

274. **Hammer, M.J.,** 1981, An assessment of current standards for selenium in drinking water: Ground Water, v. 19, no. 4, p. 366-369.

275. **Hammond, D.,** 1986, Procedures for analysis of selenium and arsenic in fish and wildlife tissues with emphasis on quality control: California Department of Fish and Game Laboratory Report no. 86-3, 14 p., appendices.

276. **Hamner, R.M., Lechak, D.L., and Greenberg, P.,** 1976, Determination of silver, arsenic, bismuth, antimony, selenium, and tellurium in chromium metal with flameless atomic absorption spectroscopy: Atomic Absorption Newsletter, v. 15, no. 5, p. 122-124.

277. **Han, H.-B., Kaiser, G., and Tolg, G.,** 1981, Decomposition of biological materials, rocks, and soils in pure oxygen under dynamic conditions for the determination of selenium at trace levels: Analytica Chimica Acta, v. 128, p. 9-21.

278. **Hansen, J.C.,** 1988, Has selenium a beneficial role in human exposure to inorganic mercury?: Medical Hypotheses, v. 25, no. 1, p. 45-53.

279. **Harland, B.F., Prosky, L., and Vanderveen, J.E.,** 1978, Nutritional adequacy of current levels of Ca, Cu, Fe, I, Mg, Mn, P, Se and Zn in the American food supply for adults, infants and toddlers, *in* Kirchgessner,M., editor, Trace element metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic of Germany: Institut fur Ernahrungsphysiologie, Technische Universitat Munchen, Freising-Weihenstephan, p. 311.

280. **Harr, J.R.,** 1978, Biological effects of selenium, *in* Oehme, F.W., editor, Toxicity of heavy metals in the environment, part 1: Marcel Dekker, Inc., New York, p. 393-426.

281. **Harr, J.R., Exon, J.H., Weswig, P.H., and Whanger, P.D.,** 1973, Relationship of dietary selenium concentration; chemical cancer induction; and tissue concentration of selenium in rats: Clinical Toxicology, v. 6, no. 3, p. 487-495.

282. **Harr, J.R., Exon, J.H., Whanger, P.D., and Weswig, P.H.,** 1978, Effect of dietary selenium on N-2-Fluorenyl-acetamide (FAA)-induced cancer in vitamin E-supplemented, selenium-depleted rats, *in* Oehme, F.W., editor, Toxicity of heavy metals in the environment, part 1: Marcel Dekker, Inc., p. 437-443.

283. **Harr, J.R., and Muth, O.H.,** 1972, Selenium poisoning in domestic animals and its relationship to man: Clinical Toxicology, v. 5, no. 2, p. 175-186.

284. **Harris, T.,** 1985, Selenium: toxic trace element threatens the West: The Bee uncovers conspiracy of silence: The Sacramento Bee, September 8-10, 1985, 16 p.

285. **Harris, T.,** 1988, Selenium: the poisoning of America: The Sacramento Bee Special Report, 8 p.

286. **Harrison, L.H.,** Colvin, B.M., Stuart, B.P., Sangster, L.T., Gorgacz, E.J., and Gosser, H.S., 1983, Paralysis in swine due to focal symmetrical poliomalacia: possible selenium toxicosis: Veterinary Pathology, v. 20, p. 265-273.

287. **Harshman, E.N.,** 1966, Genetic implications of some elements associated with uranium deposits, Shirley Basin, Wyoming: U.S. Geological Survey Professional Paper 550-C, p. C167-C173.

288. **Harshman, E.N.,** 1968, Uranium deposits of Wyoming and South Dakota, *in* Ridge, J.D., editor, Ore deposits of the United States, 1933-67, v. 1: The American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc., New York, p. 815-831.

289. **Harshman, E.N.,** 1974, Distribution of elements in some roll-type uranium deposits, *in* International Atomic Energy Agency, editors, Formation of uranium ore deposits, Proceedings of a Symposium on the Formation of Uranium Ore Deposits, organizied by the International Atomic Energy Agency, Athens, Greece, May 1974: International Atomic Energy Agency, Vienna, p. 169-183.

290. **Hartley, W.J., James, L.F., Broquist, H., and Panter, K.E.,** 1985, Pathology of experimental locoweed and selenium poisoning in pigs, *in* Seawright, A.A., Hegarty, M.P., James, L.F., and Keeler, R.F., Plant toxicology, Proceedings of the Australia-USA Poisonous Plants Symposium, Brisbane, Australia, May 14-18, 1984: Queensland Poisonous Plants Committee, Queensland Department of Primary Industries, Animal Research Institute, Yeerongpilly, p. 141-149.

291. **Hartung, R.,** 1987, Dose-response relationships, *in* Tardiff, R.G., and Rodricks, J.V., editors, Toxic substances and human risk: principles of data interpretation: Plenum Press, New York, p. 29-46.

292. **Hatch, R.C.,** 1977, Poisons causing lameness or visible disfigurement, *in* Jones, L.M., Booth, N.H., and McDonald, L.E., editors, Veterinary pharmacology and therapeutics, 4th edition: Iowa State University Press, Ames, Iowa, p. 1273-1280.

293. **Hatch, R.C., Clark, J.D., Jain, A.V., and Mahaffey, E.A.,** 1979, Treatment of induced acute selenosis in rats and weanling pigs: American Journal of Veterinary Research, v. 40, no. 12, p. 1808-1811.

294. **Heck, J.D. and Costa, M.,** 1982, In vitro assessment of the toxicity of metal compounds: II. Mutagenesis: Biological Trace Element Research, v. 4, no. 4, p. 319-330.

295. **Heinz, G.H., Hoffman, D.J., Krynitsky, A.J., and Weller, D.M.G.,** 1987, Reproduction in mallards fed selenium: Environmental Toxicology and Chemistry, v. 6, p. 423-433.

296. **Hemsted, W.R.T., Sina, M., and Cekicer, S.,** 1972, A simplified method for the determination of selenium in soils and sediments: Analyst, v. 97, p. 383-387.

297. **Herigstad, R.R., Whitehair, C.K., and Olson, O.E.,** 1973, Inorganic and organic selenium toxicosis in young swine: comparison of pathologic changes with those in swine with vitamin E-selenium deficiency: American Journal of Veterinary Research, v. 34, no. 10, p. 1227-1238.

298. **Hidiroglou, M.,** 1982, Selenium in the ruminant genital system and mammary glands: a review: Annales de Recherches Veterinaires, v. 13, no. 2, p. 133-141.

299. **Hidiroglou, M., Proulx, J., and Jolette, J.,** 1985, Nutritional muscular dystrophy in calves. Effect of administering intraruminally selenium pellets to pregnant cattle, *in* Mills, C.F., Bremner, I., and Chesters, J.K., editors, Trace elements in man and animals, Proceedings of the Fifth International Symposium on Trace Elements in Man and Animals: Commonwealth Agricultural Bureaux, Scotland, p. 744-749.

300. **Hidiroglou, M., and Zarkadas, C.G.,** 1978, The effects of selenium on the in vitro metabolism of methionine by rumen microflora of sheep, *in* Kirchgesssner, M., editor, Trace element metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic of Germany: Institut fur Ernahrungsphysiologie, Technische Universitat Munchen, Freising-Weihenstephan, p. 523-525.

301. **Hill, C.H.,** 1975, Interrelationships of selenium with other trace elements: Federation Proceedings, v. 34, no. 11, p. 2096-2100.

302. **Hilton, J.W., and Hodson, P.V.,** 1983, Effect of increased dietary carbohydrate on selenium metabolism and toxicity in rainbow trout (*Salmo gairdneri*): The Journal of Nutrition, v. 113, no. 6, p. 1241-1248.

303. **Hilton, J.W., Hodson, P.V., and Slinger, S.J.,** 1980, The requirement and toxicity of selenium in rainbow trout (*Salmo gairdneri*): The Journal of Nutrition, v. 110, no. 12, p. 2527-2535.

304. **Hintz, H.F.,** 1984, Diagnosis of nutritional status in horses: Proceedings of the 1984 Cornell Nutrition Conference for Feed Manufacturers, p. 74-77 [Departments of Animal Science and Poultry and Avian Sciences, Cornell University, New York, sponsors].

305. **Hodson, P.V., and Hilton, J.W.,** 1983, The nutritional requirements and toxicity to fish of dietary and waterborne selenium, *in* Hallberg, R., editor, Environmental biogeochemistry, Ecological bulletins no. 35: Ecological Bulletins Publishing House/FRN, Stockholm, p. 335-340.

306. **Hodson, P.V., Whittle, D.M., and Hallett, D.J.,** 1984, Selenium contamination of the Great Lakes and its potential effects on aquatic biota, *in* Nriagu, J.O., and Simmons, M.S., editors,

Toxic contaminants in the Great Lakes, v. 14 *of* the Wiley series in advances in environmental science and technology: John Wiley & Sons, Inc., New York, p. 371-391.

307. **Hoekstra, W.G.,** 1974, Biochemical role of selenium, *in* Hoekstra, W.G., Suttie, J.W., Ganther, H.E., and Mertz, W., editors, Trace element metabolism in animals-2, Proceedings of the Second International Symposium on Trace Element Metabolism in Animals, University of Wisconsin, Madison, Wisconsin: University Park Press, Baltimore, p. 61-77.

308. **Hoekstra, W.G.,** 1975a, Biochemical function of selenium and its relation to vitamin E: Federation Proceedings, v. 34, no. 11, p. 2083-2089.

309. **Hoekstra, W.G.,** 1975b, Significance of selenium as a component of glutathione peroxidase in red cell metabolism, *in* Brewer, G.J., editor, Progress in clinical and biological research, v. 1: Erythrocyte structure and function: Alan R. Liss, Inc., New York, p. 667-681.

310. **Hoffman, J.L.,** 1977, Selenite toxicity, depletion of liver S-adenosylmethionine, and inactivation of methionine adenosyltransferase: Archives of Biochemistry and Biophysics, v. 179, p. 136-140.

311. **Hogan, G.R., and Jackson, P.D.,** 1986, Dichotomous effects of cadmium and selenium on erythropoiesis in mice: Bulletin of Environmental Contamination and Toxicology, v. 36, no. 5, p. 674-679.

312. **Hogberg, J., and Alexander, J.,** 1986, Selenium, *in* Friberg, L., Nordberg, G.F., and Vouk, V.B., editors, Handbook on the toxicology of metals, second edition v. 2: Specific metals: Elsevier, Amsterdam and New York, p. 482-520.

313. **Hogue, D.E.,** 1970, Selenium: Journal of Dairy Science, v. 53, no. 8, p. 1135-1137.

314. **Holtzclaw, K.M., Neal, R.H., Sposito, G., and Traina, S.J.,** 1987, A sensitive colorimetric method for the quantitation of selenite in soil solutions and natural waters: Soil Science Society of America Journal, v. 51, p. 75-78.

315. **Holzinger, P.L., and Christensen, M.,** 1975, Selenium volatilization by fungi - a hope for poisoned land: Geological Survey of Wyoming files (unpublished), 23 p.

316. **Horvath, D.J.,** 1976, Trace elements and health, *in* Newberne, P.M., editor, Trace substances and health, a handbook, part 1: Marcel Dekker, Inc., New York, p. 319-356.

317. **Howard, J.H., III,** 1977, Geochemistry of selenium: formation of ferroselite and selenium behavior in the vicinity of oxidizing sulfide and uranium deposits: Geochimica et Cosmochimica Acta, v. 41, p. 1665-1678.

318. **Howe, S.M.,** 1979, Selenium in the blood of South Dakotans: Archives of Environmental Health, v. 34, no. 6, p. 444-448.

319. **Howell, G.O., and Hill, C.H.,** 1978, Biological interaction of selenium with other trace elements in chicks: Environmental Health Perspectives, v. 25, p. 147-150.

320. **Huttunen, J.K.,** 1986, Selenium and cardiovascular disease: Acta Pharmacologica et Toxicologica, Supplement 7, v. 59, p. 311-316.

321. **Ihnat, M.,** 1976, Selenium in foods: evaluation of atomic absorption spectrometric techniques involving hydrogen selenide generation and carbon furnace atomization: Journal of the Association of Official Analytical Chemists (AOAC), v. 59, no. 4, p. 911-922.

322. **Ihnat, M. and Miller, H.J.**, 1977, Acid digestion, hydride evolution atomic absorption spectrophotometric method for determining arsenic and selenium in foods: collaborative study, part I: Journal of the Association of Official Analytical Chemists (AOAC), v. 60, no. 6, p. 1414-1433.

323. **Ip, C.**, 1985, Selenium inhibition of chemical carcinogenesis: Federation Proceedings, v. 44, no. 9, p. 2573-2578.

324. **Ip, C.**, 1986, The chemopreventive role of selenium in carcinogenesis, *in* Poirier, L.A., Newberne, P.M., and Pariza, W., editors, Essential nutrients in carcinogenesis, advances in experimental medicine and biology, v. 206: Plenum Press, New York, p. 431-447.

325. **Irgolic, K.J., and Kudchadker, M.V.**, 1974, Organic chemistry of selenium, *in* Zingaro, R.A., and Cooper, W.C., editors, Selenium: Van Nostrand-Reinhold, New York, p. 408-545.

326. **Iyengar, G.V.**, 1984, Reference values for elemental concentrations in some human samples of clinical interest: a preliminary evaluation: The Science of the Total Environment, v. 38, p. 125-131.

327. **Iyengar, G.V.**, 1987, Reference values for the concentrations of As, Cd, Co, Cr, Cu, Fe, I, Hg, Mn, Mo, Ni, Pb, Se, and Zn in selected human tissues and body fluids: Biological Trace Element Research, v. 12, p. 263-295.

328. **Iyengar, G.V., and Gopal-Ayengar, A.R.**, 1988, Human health and trace elements including effects on high-altitude populations: Ambio, v. 17, no. 1, p. 31-35.

329. **Jackson, M.J., and Edwards, R.H.T.**, 1986, Micronutrients and human muscle diseases: Acta Pharmacologia et Toxicologica, Supplement 7, v. 59, p. 136-138.

330. **Jacobs, L.W.**, editor, 1989, Selenium in agriculture and the environment: Soil Science Society of America Special Publication Number 23, 233 p.

331. **Jaffe, W.G.**, 1976, Effect of selenium intake in humans and in rats: Proceedings of the Symposium on Selenium-Tellurium in the Environment, University of Notre Dame, Indiana, p. 188-193 [Industrial Health Foundation, Inc., sponsors].

332. **James, L.F., Ralphs, M.H., and Nielsen, D.B.**, editors, 1988, The ecology and economic impact of poisonous plants on livestock production: Westview Press, Boulder, Colorado, 428 p.

333. **Janghorbani, M., Christensen, M.J., Nahapetian, A., and Young, V.R.**, 1982, Selenium metabolism in healthy adults: quantitative aspects using the stable isotope $^{74}SeO_3^{2-}$: The American Journal of Clinical Nutrition, v. 35, p. 647-654.

334. **Janghorbani, M., and Young, V.R.**, 1984, Applications of stable isotope tracers to trace metal metabolic studies in man, *in* Frederickson, C.J., Howell, G. A., and Kasarskis, E.J., editors, The neurobiology of zinc, part A: Physiochemistry, anatomy, and techniques, Proceedings of a Satellite Symposium to the Annual Meeting of the Society for Neuroscience, Boston, Massachusetts, November 4-6, 1983: Alan R. Liss, Inc., New York, p. 343-360.

335. **Jensen, A., and Jorgensen, S.E.**, 1984, Analytical chemistry applied to metal ions in the environment, *in* Sigel, H., editor, Metal ions in biological systems, v. 18: Circulation of metals in the environment: Marcel Dekker, Inc., New York, p. 5-59.

336. **Jensen, K.A.**, 1970, Comparative studies of organic sulfur and selenium compounds: Quarterly Reports on Sulfur Chemistry, v. 5, no. 1, p. 45-52.

337. **Jensen, R., Closson, W., and Rothenberg, R.,** 1984, Selenium intoxication - New York: Morbidity and Mortality Weekly Report, v. 33, no. 12, p. 157-158.

338. **Jernelov, A., Beijer, K., and Soderlund, L.,** 1978, General aspects of toxicology, *in* Butler, G.C., editor, Principles of ecotoxicology: SCOPE 12: John Wiley & Sons, Inc., New York, p. 151-168.

339. **Jerussi, R.A.,** 1970, Selective oxidations with selenium dioxide, *in* Thyagarajan, B.S., editor, Selective organic transformations, v. 1: John Wiley & Sons, Inc., New York, p. 301-326.

340. **Johansson, E., and Lindh, U.,** 1987, Interactions of selenium with metal ions at the cellular level: Biological Trace Element Research, v. 12, p. 101-108.

341. **Johnson, C.M.,** 1975, Selenium in soils and plants: contrasts in conditions providing safe but adequate amounts of selenium in the food chain, *in* Nicholas, D.J.D., and Egan, A.R., editors, Trace elements in soil-plant-animal systems, Proceedings of the Jubilee Symposium of the Waite Agricultural Research Institute, Glen Osmond, South Australia, 1974: Academic Press, New York, p. 165-180.

342. **Johnson, C.M.,** 1976, Selenium in the environment, *in* Gunther, F.A., and Gunther, J.D., Residue reviews, v. 62: Springer-Verlag, New York, p. 101-130.

343. **Johnson, K., and Neumann, M.R.,** 1986, Geochemical model of uranium and selenium in an aquifer disturbed by in situ uranium mining, *in* Geotechnical and geohydrological aspects of waste management, Proceedings of the 8th Annual Symposium on Geotechnical and Geohydrological Aspects of Waste Management, Fort Collins, Colorado, February 5-7, 1986: A.A. Balkema, Rotterdam and Boston, p. 447-455.

344. **Johnson, R.D., and Manske, D.D.,** 1976, Pesticide residues in total diet samples (IX): Pesticides Monitoring Journal, v. 9, no. 4, p. 157-169.

345. **Jones, J.B., Jr.,** 1984, Developments in the measurement of trace metal constituents in foods, *in* Gilbert, J., editor, Analysis of food contaminants: Elsevier Applied Science Publishers, London and New York, p. 157-206.

346. **Jonson, G. and Pehrson, B.,** 1980, Selenium- a trace element of great significance for the health of livestock, *in* Lag, J., editor, Geomedical aspects in present and future research: Columbia University Press, New York, p. 115-122.

347. **Judson, G.J., Brown, T.H., and Dewey, D.H.,** 1985, Trace element supplements for sheep: evaluation of copper oxide and a soluble glass bullet, impregnated with copper and cobalt, *in* Mills, C.F., Bremner, I., and Chesters, J.K., editors, Trace elements in man and animals, Proceedings of the Fifth International Symposium on Trace Elements in Man and Animals: Commonwealth Agricultural Bureaux, Scotland, p. 729-732.

348. **Judson, G.J., Koh, T.-S., McFarlane, J.D., Turnbill, R.K., and Kempe, B.R.,** 1985, Copper and selenium supplements for cattle: evaluation of the selenium bullet, copper oxide and the soluble glass bullet, *in* Mills, C.F., Bremner, I., and Chesters, J.K., editors, Trace elements in man and animals, Proceedings of the Fifth International Symposium on Trace Elements in Man and Animals: Commonwealth Agricultural Bureaux, Scotland, p. 725-728.

349. **Judson, G.J., and Obst, J.M.,** 1975, Diagnosis and treatment of selenium inadequacies in the grazing ruminant, *in* Nicholas, D.J.D., and Egan, A.R., editors, Trace elements in soil-plant-animal systems, Proceedings of the Jubilee Symposium of the Waite Agricultural Research Institute, Glen Osmond, South Australia, 1974: Academic Press, New York, p. 385-405.

350. **Jukes, T.H.,** 1975, Mercury in fish: Journal of the American Medical Association, v. 233, no. 9, p. 1001-1002.

351. **Julius, A.D., Davies, M.H., and Birt, D.F.,** 1983, Toxic effects of dietary selenium in the Syrian hamster: Annals of Nutrition and Metabolism, v. 27, p. 296-305.

352. **Jump, R.K. and Sabey, B.R.,** 1985, Evaluation of the NH4HCO3-DTPA(AB-DTPA) soil test for identifying seleniferous soils: Proceedings of the Second Annual Meeting of the American Society for Surface Mining and Reclamation, October 8-10, 1985, Denver, Colorado, p. 87-90.

353. **Kaiser, I.I., Young, P.A., and Johnson, J.D.,** 1979, Chronic exposure of trout to waters with naturally high selenium levels: effects on transfer RNA methylation: Journal of the Fisheries Research Board of Canada, v. 36, no. 6, p. 689-694.

354. **Kalouskova, J., Parizek, J., Pavlik, L, and Benes, J.,** 1978, Studies on the mechanism of sex-linked difference in the toxicity and retention of methylated selenium compounds, *in* Kirchgessner, M., editor, Trace element metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic of Germany: Institut fur Ernahrungsphysiologie, Technische Universitat Munchen, Freising-Weihenstephan, p. 611-613.

355. Kalouskova, J., and Pavlik, L., 1982, Protection against selenite toxicity by previous administration of selenium compounds: Physiologia Bohemoslovaca, v. 31, p. 315-321.

356. **Karlson, U., and Frankenberger, W.T., Jr.,** 1986, Determination of selenate by single-column ion chromatography: Journal of Chromatography, v. 368, p. 153-161.

357. **Karlson, U., and Frankenberger, W.T., Jr.,** 1988, Determination of gaseous selenium-75 evolved from soil: Soil Science Society of America Journal, v. 52, p. 678-681.

358. **Kay, H.D.,** 1976. Environmental pollutants of agriculture: livestock, *in* Duckham, A.N., Jones, J.G.W., and Roberts, E.H., editors, Food production and consumption, the efficiency of human food chains and nutrient cycles: American Elsevier Publishing Company, Inc., New York, p. 337-346.

359. **Kazantzis, G.,** 1981, Role of cobalt, iron, lead, manganese, mercury, platinum, selenium, and titanium in carcinogenesis: Environmental Health Perspectives, v. 40, p. 143-161.

360. **Keck, G.,** 1989, Toxicology of selenium in veterinary medicine, *in* Neve, J., and Favier, A., editors, Selenium in medicine and biology, Proceedings of the Second International Congress on Trace Elements in Medicine and Biology, March, 1988, Avoriaz, France: Walter de Gruyter, Berlin and New York, p. 393-396.

361. **Keeler, R.F., and Laycock, W.A.,** 1988, Use of plant toxin information in management decisions, *in* James, L.F., Ralphs, M.H., and Nielsen, D.B., editors, The ecology and economic impact of poisonous plants on livestock production: Westview Press, Boulder, Colorado, p. 347-362.

362. **Keeler, R.F., Van Kampen, K.R., and James, L.F.,** editors, 1978, Effects of poisonous plants on livestock: Academic Press, New York, 600 p.

363. **Kiene, R.P., Oremland, R.S., Catena, A., Miller, L.G., and Capone, D.G.,** 1986, Metabolism of reduced methylated sulfur compounds in anaerobic sediments and by a pure culture of an estuarine methanogen: Applied and Environmental Microbiology, v. 52, no. 5, p. 1037-1045.

364. **Kilness, A.W.,** 1987, Selenium, bacteria, and the immune system: Geological Survey of Wyoming files (unpublished), 10 p.

365. **Kirchgessner, M., Schwarz, F.J., Grassmann, E., and Steinhart, H.,** 1979, Interactions of copper with other trace elements, *in* Nriagu, J.O., editor, Copper in the environment, part 2: health effects: John Wiley & Sons, Inc., New York, p. 433-472.

366. **Kiremidjian-Schumacher, L., and Stotzky, G.,** 1987, Selenium and immune responses: Environmental Research, v. 42, no. 2, p. 277-303.

367. **Klasing, S.A., and Pilch, S.M.,** 1988, Agricultural drainage water contamination in the San Joaquin Valley: a public health perspective for selenium, boron, and molybdenum: San Joaquin Valley Drainage Program, Sacramento, California, 143 p.

368. **Klaverkamp, J.F., Macdonald, W.A., Lillie, W.R., and Lutz, A.,** 1983, Joint toxicity of mercury and selenium in Salmonid eggs: Archives of Environmental Contamination and Toxicology, v. 12, no. 4, p. 415-419.

369. **Knapton, J.R., Jones, W.E., and Sutphin, J.W.,** 1988, Reconnaissance investigation of water quality, bottom sediment, and biota associated with irrigation drainage in the Sun River area, west-central Montana, 1986-87: U.S. Geological Survey Water-Resources Investigations Report 87-4244, 78 p.

370. **Knight, S.H., and Beath, O.A.,** 1937, The occurrence of selenium and seleniferous vegetation in Wyoming: University of Wyoming Agricultural Experiment Station Bulletin 221, 64 p.

371. **Knott, S.G., McCray, C.W.R., and Hall, W.T.K.,** 1958, Selenium poisoning in horses in North Queensland: The Queensland Journal of Agricultural Science, v. 15, no. 2, p. 43-58.

372. **Koch, N.C.,** 1967, Disappearance of the dinosaurs: Journal of Paleontology, v. 41, no. 4, p. 970-972.

373. **Koivistoinen, P.,** 1986, Selenium deficiency in Finnish foods and nutrition: research strategy and measures: Acta Pharmacologica et Toxicologica, Supplement 7, v. 59, p. 104-110.

374. **Koljonen, T.,** 1978, The availability of selenium as a nutrient in different geological environments, with special reference to Finland and Iceland: Ambio, v. 7, no. 4, p. 169-171.

375. **Koller, L.D.,** 1979, Effects of environmental contaminants on the immune system: Advances in Veterinary Science and Comparative Medicine, v. 23, p. 267-295.

376. **Koller, L.D.,** 1980, Public health risks of environmental contaminants: heavy metals and industrial chemicals: Journal of the American Veterinary Medical Association, v. 176, no. 6, p. 525-529.

377. **Koller, L.D., and Exon, J.H.,** 1986, The two faces of selenium - deficiency and toxicity - are similar in animals and man: Canadian Journal of Veterinary Research, v. 50, p. 297-306.

378. **Kolm, K.E.,** 1975, Mapping of seleniferous vegetation and associated soils in the Lower Wasatch Formation, Powder River Basin, Wyoming: University of Wyoming Special Report, Contract NAS 9-13298, prepared for NASA/Johnson Space Flight Center, Houston, Texas, 20 p.

379. **Kolm, K.E.,** 1975, Selenium in soils of the Lower Wasatch Formation, Campbell County, Wyoming: geochemistry, distribution, and environmental hazards: University of Wyoming Special Report, Contract NAS 9-13298, prepared for NASA/Johnson Space Flight Center, Houston, Texas, 99 p.

380. **Koppel, C., Baudisch, H., Beyer, K.H., Kloppel, I., and Schneider, V.,** 1986, Fatal poisoning with selenium dioxide: Clinical Toxicology, v. 24, no. 1, p. 21-35.

381. **Korkman, J.,** 1984, Selenium in fertilizers: Proceedings of the Third International Symposium on Industrial Uses of Selenium and Tellurium, Stockholm, Sweden, p. 438-340 [Selenium-Tellurium Development Association, Inc., sponsors].

382. **Kraybill, H.F.,** 1969, Food contaminants and gastrointestinal or liver neoplasia: survey of experimental observations: Environmental Research 2, p. 231-246.

383. **Kreuzer, W.,** 1973, Toxic microelements and therapeutica in food of animal origin: Environmental Quality and Safety, v. 2, p. 105-109.

384. **Krishnan, S., Vasanthy, N., and Lalitha, K.,** 1989, Effect of selenium on the metabolism of a novel methanogen, *in* Neve, J., and Favier, A., editors, Selenium in medicine and biology, Proceedings of the Second International Congress on Trace Elements in Medicine and Biology, March, 1988, Avoriaz, France: Walter de Gruyter, Berlin and New York, p. 385-388.

385. **Kumaresan, A., and Aliu, Y.O.,** 1983, Basic concepts and importance of trace elements in goats: Indian Journal of Nutrition and Dietetics, v. 20, no. 11, p. 361-368.

386. **Ladenstein, R., Epp, O., Romisch, A., and Wendel, A.,** 1978, Structural studies on the selenoenzyme glutathione peroxidase, *in* Kirchgessner, M., editor, Trace element metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic of Germany: Institut fur Ernahrungsphysiologie, Technische Universitat Munchen, Freising-Weihenstephan, p. 72-76.

387. **Lafond, M.G. and Calabrese, E.J.,** 1979, Is the selenium drinking water standard justified?: Medical Hypotheses, v. 5, p. 877-899.

388. **Lag, J. and Steinnes, E.,** 1974, Soil selenium in relation to precipitation: Ambio, v. 3, no. 6, p. 237-238.

389. **Lagace, A., Bell, D.S., Pounden, W.D., and Moxon, A.L.,** 1961, Selenium can prevent lamb disease: Ohio Farm and Home Research, January-February, 2 p.

390. **Lakin, H.W.,** 1972, Selenium accumulation in soils and its absorption by plants and animals: Geological Society of America Special Paper 140, p. 45-53.

391. **Lakin, H.W.,** 1973, Selenium in Our Environment, *in* Kothny, E.L., editor, Trace elements in the environment: Division of Water, Air, and Waste Chemistry symposium, 162nd meeting of the American Chemical Society, September 15, 1971, Washington, D.C., p. 96-111.

392. **Lakin, H.W., and Byers, H.G.,** 1941, Selenium occurrence in certain soils in the United States, with a discussion of related topics: sixth report: U.S. Department of Agriculture Technical Bulletin No. 783, 27 p.

393. **Lakin, H.W., and Trites, A.R., Jr.,** 1958, The behavior of selenium in the zone of oxidation: Symposium de Exploration Geoquimica, 20th International Geological Congress, Mexico City, Mexico, 1956, p. 113-124.

394. **Lamand, M.,** 1989, Selenium deficiency in animals, *in* Neve, J., and Favier, A., editors, Selenium in medicine and biology, Proceedings of the Second International Congress on Trace Elements in Medicine and Biology, March, 1988, Avoriaz, France: Walter de Gruyter, Berlin and New York, p. 357-368.

395. **Lambing, J.H., Jones, W.E., and Sutphin, J.W.,** 1988, Reconnaissance investigation of water quality, bottom sediment, and biota associated with irrigation drainage in the Bowdoin National Wildlife Refuge and adjacent areas of the Milk River Basin, northeastern Montana, 1986-87: U.S. Geological Survey Water-Resources Investigations Report, 87-4243, 71 p.

396. **Lane, H.W., Tracey, C.K., and Medina, D.,** 1984, Growth, reproduction rates, and mammary gland selenium concentration and glutathione-peroxidase activity of BALB/c female mice fed two dietary levels of selenium: The Journal of Nutrition, v. 114, p. 323-331.

397. **Larson, L.R.,** 1985, Water quality of the North Platte River, east-central Wyoming: U.S. Geological Survey Water-Resources Investigation Report 84-4172, 85 p.

398. **Lauchli, A., Meyer, J., and Tanji, K.K.,** 1986, Conference proceedings: U.C. research and planning conference on salinity, irrigation, and drainage, and toxic trace elements in California's agriculture: University of California Salinity/Drainage Task Force, 38 p.

399. **Lee, M., Dong, A., and Yano, J.,** 1969, Metabolism of ^{75}Se-Selenite by human whole blood *in vitro*: Federation Proceedings, v. 28, p. 809 [abstract].

400. **Lemly, A.D.,** 1982, Determination of selenium in fish tissues with differential pulse polarography: Environmental Technology Letters, v. 3, p. 497-502.

401. **Lemly, A.D.,** 1985a, Ecological basis for regulating aquatic emissions from the power industry: the case with selenium: Regulatory Toxicology and Pharmacology, v. 5, p. 465-486.

402. **Lemly, A.D.,** 1985b, Toxicology of selenium in a freshwater reservoir: implications for environmental hazard evaluation and safety: Ecotoxicology and Environmental Safety, v. 10, p. 314-338.

403. **Lemly, A.D.,** 1986, Effects of selenium on fish and other aquatic life, *in* Summers, J.B., and Anderson, S.S., editors, Toxic substances in agricultural water supply and drainage, defining the problem, Proceedings from the 1986 Regional Meetings, Denver, Colorado, August 21-23, 1986: U.S. Committee on Irrigation and Drainage, Denver, p. 153-162.

404. **Lemly, A.D., and Smith, G.J.,** 1987, Aquatic cycling of selenium: implications for fish and wildlife: U.S. Fish and Wildlife Service Fish and Wildlife Leaflet 12, 10 p.

405. **Lemos, M.A.S.,** 1980, Nutriochemistry of selenium: Ciencia Biologica (Portugal), v. 5, no. 2, p. 205-207.

406. **Leonard, T.K., Mohs, M.E., and Watson, R.R.,** 1987, The cardiovascular effects of alcohol, *in* Watson, R.R., editor, Nutrition and heart disease, v. II: CRC Press, Inc., Boca Raton, Florida, p. 20-47.

407. **Less, J.F., and Ewan, R.C.,** 1988, Effect of genetic background on vitamin E and selenium status in swine: Journal of Animal Science, v. 66, supplement 1, p. 134-135 [abstract].

408. **Letey, J., Roberts, C., Penberth, M., and Vasek, C.,** 1986, An agricultural dilemma: drainage water and toxics disposal in the San Joaquin Valley: University of California Agricultural Experiment Station Special Publication 3319, 56 p.

409. **Levander, O.A.,** 1971, Factors that modify the toxicity of selenium, *in* Mertz, W., and Cornatzer, W.E., editors, Newer trace elements in nutrition, Proceedings of the International Symposium on the Newer Trace Elements in Nutrition: Marcel Dekker, Inc., New York, p. 57-83.

410. **Levander, O.A.,** 1972, Metabolic interrelationships and adaptions in selenium toxicity: Annals of the New York Academy of Sciences, v. 192, p. 181-192.

411. **Levander, O.A.,** 1975, Selenium and chromium in human nutrition: Journal of the American Dietetic Association, v. 66, no. 4, p. 338-344.

412. **Levander, O.A.,** 1976, Selected aspects of the comparative metabolism and biochemistry of selenium and sulfur, *in* Prasad, A.S., and Oberleas, D., editors, Trace elements in human health and disease, v. 2: Essential and Toxic Elements: Academic Press, New York, p. 135-163.

413. **Levander, O.A.,** 1977, Metabolic interrelationships between arsenic and selenium: Environmental Health Perspectives, v. 19, p. 159-164.

414. **Levander, O.A.,** 1982a, Clinical consequences of low selenium intake and its relationship to vitamin E: Annals of the New York Academy of Sciences, v. 393, p. 70-82.

415. **Levander, O.A.,** 1982b, Selenium: biochemical actions, interactions, and some human health implications, *in* Prasad, A.S., editor, Current topics in nutrition and disease, v. 6: Clinical, biochemical, and nutritional aspects of trace elements: Alan R. Liss, Inc., New York, p. 345-368.

416. **Levander, O.A.,** 1983a, Considerations in the design of selenium bioavailability studies: Federation Proceedings, v. 42, no. 6, p. 1721-1725.

417. **Levander, O.A.,** 1983b, Recent developments in selenium nutrition: Nutrition Update, v. 1, p. 147-162.

418. **Levander, O.A.,** 1985, Considerations on the assessment of selenium status: Federation Proceedings, v. 44, no. 9, p. 2579-2583.

419. **Levander, O.A.,** 1986a, Progress in establishing human trace element requirements: selenium, zinc, and copper: Acta Pharmacologia et Toxicologia, Supplement 7, v. 59, p. 83-89.

420. **Levander, O.A.,** 1986b, Selenium, *in* Mertz, W., editor, Trace elements in human and animal nutrition, fifth edition, v. 2: Academic Press, Inc., Orlando, p. 209-279.

421. **Levander, O.A.,** 1987, A global view of human selenium nutrition: Annual Review of Nutrition, v. 7, p. 227-250.

422. **Levander, O.A.,** 1987, Assessing the bioavailability of selenium in foods, *in* Combs, G. F., Jr., Spallholz, J. E., Levander O. A., and Oldfield, J. E., editors, Selenium in biology and medicine, part A, Proceedings of the Third International Symposium, Beijing, 1984: AVI Book, Van Nostrand Reinhold Company, New York, p. 403-412.

423. **Levander, O.A., Morris, V.C., and Higgs, D.J.,** 1974, The relationship between the selenium-catalyzed swelling of rat-liver mitochondria induced by glutathione(GSH) and the selenium-catalyzed reduction of cytochrome c by GSH, *in* Hoekstra, W.G., Suttie, J.W., Ganther, H.E., and Mertz, W., editors, Trace element metabolism in animals-2, Proceedings of the Second International Symposium on Trace Element Metabolism in Animals, University of Wisconsin, Madison, Wisconsin: University Park Press, Baltimore, p. 584-586.

424. **Levander, O.A., Young, M.L., and Meeks, S.A.,** 1969, Selenium metabolism in rats fed linseed oil meal (lom): Federation Proceedings, v. 28, p. 809 [abstract].

425. **Lewis, B.A.G.**, 1976, Selenium in biological systems, and pathways for its volatilization in higher plants, *in* Nriagu, J.O., editor, Environmental biogeochemistry, v. 1: Carbon, nitrogen, phosphorus, sulfur, and selenium cycles, Proceedings of the 2nd International Symposium on Environmental Biogeochemistry: Ann Arbor Science Publishers, Inc., Ann Arbor, Michigan, p. 389-409.

426. **Lillebo, H.P., Shaner, S., Carlson, D., Richard, N., and DuBowy, P.**, 1988, Water quality criteria for selenium and other trace elements for protection of aquatic life and its uses in the San Joaquin Valley, Appendix D, Water quality criteria: [California] State Water Resources Control Board SWRCB Order No. W.Q. 85-1, 151 p.

427. **Lindh, U., and Johansson, E.**, 1984, A microanalytical technique for determination of selenium and other trace elements in individual cells: Proceedings of the Third International Symposium on the Industrial Uses of Selenium and Tellurium, Stockholm, Sweden, p. 479-487 [Selenium-Tellurium Development Association, Inc., sponsors].

428. **Lindh, U., and Johansson, E.**, 1987, Protective effects of selenium against mercury toxicity as studied in the rat liver and kidney by nuclear analytical techniques: Biological Trace Element Research, v. 12, p. 109-120.

429. **Lindstrom, K.**, 1984, Selenium and algal growth: Proceedings of the Third International Symposium on Industrial Uses of Selenium and Tellurium, Stockholm, Sweden, p. 441-469 [Selenium-Tellurium Development Association, Inc., sponsors].

430. **Liotta, D. and Monahan, R., III**, 1986, Selenium in organic synthesis: Science, v. 231, p. 356-361.

431. **Litov, R.E.**, 1987, Evaluating the bioavailability of selenium from nutritional formulas for enteral use, *in* Combs, G.F., Jr., Spallholz, J. E., Levander O. A., and Oldfield, J. E., editors, Selenium in biology and medicine, part A, Proceedings of the Third International Symposium, Beijing, 1984: AVI Book, Van Nostrand Reinhold Company, New York, p. 426-435.

432. **Liu, V.J.K., and Chen, X.S.**, 1987, Trace elements in the cardiovascular patient: prevention and treatment, *in* Watson, R.R., editor, Nutrition and heart disease, v. II: CRC Press, Inc., Boca Raton, Florida, p. 57-69.

433. **Lo, M. and Sandi, E.**, 1980, Selenium: occurrence in food and its toxological significance - a review: Journal of Environmental Pathology and Toxicology, v. 4, no. 1, p. 193-218.

434. **Loew, F.M., Olfert, E.D., and Schiefer, B.**, 1975, Chronic selenium toxicosis in *Cynomolgus* monkeys: International Conference on Heavy Metals in the Environment, p. B133-B135 [Electric Power Research Institute, sponsor].

435. **Lombeck, I., Kasperek, K., Feinendegen, L.E., and Bremer, H.J.**, 1978, The state and supply of selenium in healthy children and dietetically treated patients with inborn errors of metabolism, *in* Kirchgessner, M., Trace element metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic of Germany: Institut fur Ernahrungsphysiologie, Technische Universitat Munchen, Freising-Weihenstephan, p. 312-315.

436. **Louderback, T.**, 1975, Selenium and the environment: Colorado School of Mines Mineral Industries Bulletin, v. 18, no. 3, 14 p.

437. **Luoma, P.V., Korpela, H., Sotaniemi, E.A., and Kumpulainen, J.**, 1985, Serum selenium, glutathione peroxidase, lipids, and human liver microsomal enzyme activity: Biological Trace Element Research, v. 8, no. 2, p. 113-121.

438. **Lu-Zhen, G., Rui-Hua, Z., Shi-An, Y., and Quang-Qi, Y.,** 1987, Influence of dietary constituents on the bioavailability of selenium, *in* Combs, G. F., Jr., Spallholz, J. E., Levander O. A., and Oldfield, J. E., editors, Selenium in biology and medicine, part A, Proceedings of the Third International Symposium, Beijing, 1984: AVI Book, Van Nostrand Reinhold Company, New York, p. 490-494.

439. **Maag, D.D., and Glenn, M.W.,** 1966, Toxicity of selenium: farm animals, *in* Muth, O.H., Oldfield, J.E., and Weswig, P.H., editors, Selenium in biomedicine, First International Symposium: AVI Publishing Co., Inc., Westport, Connecticut, p. 127-140.

440. **Maag, D.D., Orsborn, J.S., and Clopton, J.R.,** 1960, The effect of sodium selenite on cattle: American Journal of Veterinary Research, v. 21, no. 85, p. 1049-1053.

441. **MacDonald, D.W., Christian, R.G., Whenham, G.R., and Howell, J.,** 1976, A review of some aspects of vitamin E-selenium responsive diseases with a note on their possible incidence in Alberta: Canadian Veterinary Journal, v. 17, p. 3, p. 61-71.

442. **Magos, L.,** 1981, Synergism and antagonism in metal toxicology, *in* Williams, D. F., editor, Systemic aspects of biocompatibility: v. 1, CRC series in biocompatibility: CRC Press, Inc., Boca Raton, Florida, p. 87-100.

443. **Magos, L., and Berg, G.G.,** 1988, Selenium, in Clarkson, T.W., Friberg, L., Nordberg, G.F., and Sager, P.R., editors, Biological monitoring of toxic metals: Plenum Press, New York, p. 383-405.

444. **Magos, L., and Webb, M.,** 1980, The interactions of selenium with cadmium and mercury: CRC Critical Reviews in Toxicology, v. 8, no. 1, p. 1-42.

445. **Maneval, J.E., Klein, G., and Sinkovic, J.,** 1985, Selenium removal from drinking water by ion exchange: U.S. Environmental Protection Agency Research and Development Project Summary, E.P.A./600/S2-85/074, 2 p.

446. **Marchant, W.N., Dannenberg, R.O., and Brooks, P.T.,** 1978, Selenium removal from acidic waste water using zinc reduction and lime neutralization: U.S. Bureau of Mines Report of Investigations 8312, 9 p.

447. **Marlowe, M., Errera, J., and Case, J.C.,** 1986, Hair selenium levels and children's classroom behavior: Journal of Orthomolecular Medicine, v. 1, no. 2, p. 91-96.

448. **Martin, D.B., and Hartman, W.A.,** 1984, Arsenic, cadmium, lead, mercury, and selenium in sediments of riverine and pothole wetlands of the north central United States: Journal of the Association of Official Analytical Chemists, v. 67, no. 6, p. 1141-1146.

449. **Martin, J.L.,** 1973, Selenium assimilation in animals, *in* Klayman, D.L. and Gunther, W.H.H., editors, Organic selenium compounds: their chemistry and biology: John Wiley & Sons, Inc., New York, p. 663-691.

450. **Martin, J.L.,** 1981, Assimilation and metabolism of organoselenium compounds, *in* Cagniant, D., and Kirsch, G., editors, Proceedings of the Third International Symposium on Organic Selenium and Tellurium Compounds: Universite de Metz, France p. 133-144.

451. **Martin, J.L., and Gerlach, M.L.,** 1972, Selenium metabolism in animals: Annals of the New York Academy of Sciences, v. 192, p. 193-199.

452. **Martin, J.L., Shrift, A., and Gerlach, M.L.,** 1969, The characterization of the selenoamino acids in various selenium accumulator plants: Federation Proceedings, v. 28, p. 809 [abstract].

453. **Martin, J.L., and Spallholz, J.S.,** 1976, Selenium in the immune response: Proceedings of the Symposium on Selenium-Tellurium in the Environment, University of Notre Dame, Indiana, p. 204-225 [Industrial Health Foundation, Inc., sponsors].

454. **Masson, M.R.,** 1976, Determination of selenium and tellurium in organic compounds and organic materials - a review: Mikrochimica Acta, v. 1, no. 4-5, p. 419-439.

455. **Masukawa, T., and Iwata, H.,** 1979, Protective effect of selenite on nitrite toxicity: Experientia, v. 35, p. 1360-1361.

456. **Matoba, R., Kimura, H., Uchima, E., Abe, T., Yamada, T., Mitsukuni, Y., and Shikata, I.,** 1986, An autopsy case of acute selenium (selenious acid) poisoning and selenium levels in human tissues: Forensic Science International, v. 31, p. 87-92.

457. **Mautner, H.G.,** 1972, Sulfur and selenium isologs as probes of active sites: Annals of the New York Academy of Science, v. 192, p. 167-174.

458. **May, T.W., and McKinney, G.L.,** 1981, Cadmium, lead, mercury, arsenic, and selenium concentrations in freshwater fish, 1976-77 -national pesticide monitoring program: Pesticides Monitoring Journal, v. 15, no. 1, p. 14-38.

459. **Mayland, H.F., and James, L.F.,** 1988, Ecological aspects of selenosis on rangelands, *in* James, L.F., Ralphs, M.H., and Nielsen, D.B., editors, The ecology and economic impact of poisonous plants on livestock production: Westview Press, Boulder, p. 275-293.

460. **McCarty, M.F.,** 1984, A practical prescription for cancer prevention - synergistic use of chemopreventetive agents: Medical Hypotheses, v. 14, no. 3, p. 213-225.

461. **McConnell, K.P., and Carpenter, D.M.,** 1971, Interrelationship between selenium and specific trace elements: Society for Experimental Biology and Medicine, Proceedings, v. 137, no. 3, p. 996-1001.

462. **McLean, J.W., Thomson, G.G., and Claxton, J.H.,** 1959, Growth responses to selenium in lambs: New England Veterinary Journal, v. 7, p. 47-52.

463. **McWeeny, D.J., Crews, H.M., Massey, R.C., and Burrell, J.A.,** 1985, Effects of digestive enzymes on the solubility of trace elements in food, *in* Mills, C.F., Bremner, I, and Chesters, J.K., editors, Trace elements in man and animals-5, Proceedings of the Fifth International Symposium on Trace Elements in Man and Animals: Commonwealth Agricultural Bureaux, Scotland, p. 628-630.

464. **Medina, D.,** 1986, Mechanisms of selenium inhibition of tumorigenesis, *in* Poirier, L.A., Newberne, P.M., and Pariza, W., editors, Essential nutrients in carcinogenesis, advances in experimental medicine and biology, v. 206: Plenum Press, New York, p. 465-472.

465. **Medina, D., Lane, H.W., and Shepherd, F.,** 1983, Effect of dietary selenium levels on 7,12-dimethylbenzanthracene-induced mouse mammary tumorigenesis: Carcinogenisis, v. 4, no. 9, p. 1159-1163.

466. **Medinsky, M.A., Cuddihy, R.G., Griffith, W.C., Weissman, S.H., and McClellan, R.O.,** 1985, Projected uptake and toxicity of selenium compounds from the environment: Environmental Research, v. 36, p. 181-192.

467. **Menzer, R.E.,** 1987, Selection of animal models for data interpretation, *in* Tardiff, R.G., and Rodricks, J.V., editors, Toxic substances and human risk: principles of data interpretation: Plenum Press, New York, p. 133-152.

468. **Merian, E.**, 1984, Introduction on environmental chemistry and global cycles of chromium, nickel, cobalt, beryllium, arsenic, cadmium and selenium, and their derivatives: Toxicological and Environmental Chemistry, v. 8, no. 1, p. 9-38.

469. **Mertz, W.**, 1977, Criteria for adequacy and safety of trace elements in animal nutrition: Journal of Animal Science, v. 44, no. 3, p. 469-474.

470. **Michalski, J.**, 1972, The chemistry and stereochemistry of organic selenium-phosphorus acids and phosphine selenides: Annals of the New York Academy of Sciences, v. 192, p. 90-100.

471. **Michel, R.L., Whitehair, C.K., and Keahey, K.K.**, 1969, Dietary hepatic necrosis associated with selenium-vitamin E deficiency in swine: Journal of the American Veterinary Medical Association, v. 155, no. 1, p. 50-59.

472. **Mihailovic, M.**, 1984, Selenium in animal and human nutrition: Periodicum Biologorum, v. 86, no. 2, p. 203-211.

473. **Millar, K.R.**, 1977, Selenium in animal health and disease, *in* Trace elements in human and animal health in New Zealand: Waikato University Press, Hamilton, New Zealand, p. 84-88.

474. **Miller, E.R., Loudendslager, M.S., Ku, P.K., Whetter, P.A., Whitehair, C.K., and Ullrey, D.E.**, 1895, Importance of dam's diet and colostrum for the biological antioxidant status of the young pig, *in* Mills, C.F., Bremner, I, and Chesters, J.K., editors, Trace elements in man and animals-5, Proceedings of the Fifth International Symposium on Trace Elements in Man and Animals: Commonwealth Agricultural Bureaux, Scotland, p. 118-120.

475. **Milner, J.A.**, 1984, Selenium and carcinogenesis, *in* Finley, J.W., and Schwass, D.E., editors, Xenobiotic metabolism: nutritional effects: American Chemical Society (ACS) Symposium Series 277:, Washington D.C., p. 267-282.

476. **Milner, J.A.**, 1985, Effect of selenium on virally induced and transplantable tumor models: Federation Proceedings, v. 44, no. 9, p. 2568-2572.

477. **Milner, J.A.**, 1986, Inhibition of chemical carcinogenesis and tumorigenesis by selenium, *in* Poirier, L.A., Newberne, P.M., and Pariza, W., editors, Essential nutrients in carcinogenesis, advances in experimental medicine and biology, v. 206: Plenum Press, New York, p. 449-463.

478. **Milner**, J.A., and Picciano, M.F., 1986, Selenium in maternal and infant nutrition: Contemporary Nutrition, v. XI, no. 5, 2 p.

479. **Mitchell, H.L.**, 1975, Report on plants: Journal of the Association of Official Analytical Chemists, v. 58, no. 2, p. 194-195.

480. **Molyneux, R.J., James, L.F., and Panter, K.E.**, 1985, Chemistry of toxic constituents of locoweed (*Astragalus & Oxytropis*) species, *in* Seawright, A.A., Hegarty, M.P., James, L.F., and Keeler, R.F., editors, Plant toxicology, Proceedings of the Australia-U.S.A. Poisonous Plants Symposium, Brisbane, Australia: Queensland Poisonous Plants Committee, Queensland Department of Primary Industries, Animal Research Institute, Yeerongpilly, p. 266-278.

481. **Money, D.F.L.**, 1977, Vitamin E, selenium, iron and vitamin A content of livers from sudden infant death syndrome cases and control children: interrelationships and possible significance, *in* Trace elements in human and animal health in New Zealand: Waikato University Press, Hamilton, New Zealand, p. 91 [abstract].

482. **Moore, M.R., 1979,** Diet and lead toxicity: Proceedings of the Nutrition Society, v. 38, no. 2, p. 243-250.

483. **Moore, T.D., and Mitchum, D.L., 1976,** A survey for selenium in waters and fish tissues from selected lakes and springs in Wyoming: Wyoming Department of Game and Fish (unpublished), 7 p.

484. **Morris, V.C., and Levander, O.A., 1970,** Selenium content of foods: The Journal of Nutrition, v. 100, p. 1383-1388.

485. **Morrison, L.L., and Chavez, E.R., 1983,** Selenium-arsenic interaction in the weanling pig: Canadian Journal of Animal Science, v. 63, p. 239-246.

486. **Morrow, D.A., 1968,** Acute selenite toxicosis in Lambs: Journal of the American Veterinary Medical Association, v. 152, no. 11, p. 1625-1629.

487. **Moxon, A.L., 1937,** Alkali disease or selenium poisoning: South Dakota Agricultural Experiment Station Bulletin 311, 91 p.

488. **Moxon, A.L., 1976,** Natural occurrence of selenium, *in* Proceedings of the Symposium on Selenium-Tellurium in the Environment, University of Notre Dame, Indiana, p. 1-8 [Industrial Health Foundation, Inc., sponsors].

489. **Moxon, A.L., and Olson, O.E., 1974,** Selenium in agriculture, *in* Zingaro, R.A., and Cooper, W.C., editors, Selenium: Van Nostrand-Reinhold, New York, p. 675-707.

490. **Moxon, A.L., Olson, O.E., and Searight, W.V., 1950,** Selenium in rocks, soils, and plants: South Dakota Agricultural Experiment Station Technical Bulletin No. 2, 94 p.

491. **Mudd, A.J., and Stranks, M.H., 1981,** Mineral and trace element requirements of pigs, *in* Haresign, W., editor, Recent advances in animal nutrition: Butterworth Publishing, Sevenoaks, U.K., p. 93-107.

492. **Mushak, P., 1985,** Potential Impact of acid precipitation on arsenic and selenium: Environmental Health Perspectives, v. 63, p. 105-113.

493. **Muth, O.H., and Binns, W., 1964,** Selenium toxicity in domestic animals: Annals of the New York Academy of Sciences, v. 111, article 2, p. 583-590.

494. **Muth, O.H., Oldfield, J.E., and Weswig, P.H., 1967,** Selenium in biomedicine, First International Symposium, Oregon State University: The AVI Publishing Company, Inc., Westport, Connecticut, 445 p.

495. **Naftz, D.L., and Rice, J., 1988,** Geochemical processes controlling selenium concentrations in rocks disturbed by mining and in ground water after mining; Powder River Basin, Wyoming, *in* Morel-Seytoux, H.J., and DeCoursey, D.G., editors, Proceedings of the Eighth Annual AGU Front Range Branch Hydrology Days: Hydrology Days Publications, Fort Collins, Colorado, p. 163-173.

496. **Naganuma, A., Tanaka, T., Maeda, K., Matsuda, R., Tabata-Hanyu, J., and Imura, N., 1983,** The interaction of selenium with various metals in vitro and in vivo: Toxicology, v. 29, p. 77-86.

497. **National Research Council, Committee on Medical and Biologic Effects of Environmental Pollutants, 1976,** Selenium: National Academy of Sciences, Washington, D.C., 203 p.

498. **National Research Council, Subcommittee on Mineral Toxicity in Animals,** 1980, Selenium, *in* Mineral tolerance of domestic animals: National Academy of Sciences, Washington, D.C., p. 392-420.

499. **National Research Council, Subcommittee on Selenium,** 1971, Selenium in nutrition: National Academy of Sciences, Washington, D.C., 79 p.

500. **National Research Council, Subcommittee on Selenium,** 1983, Selenium in nutrition, revised edition: National Academy Press, Washington, D.C., 174 p.

501. **Nauen,** C.E., 1983, Compilation of legal limits for hazardous substances in fish and fishery products: FAO Fisheries Circular No. 764 (FIRI/C764), Food and Agriculture Organization of the United Nations, Rome, 102 p.

502. **Neathery,** M. W., 1976, Tolerance levels of essential elements for livestock and poultry: Journal of Animal Science, v. 43, no. 2, p. 328-329 [abstract].

503. **Neathery, M.W., and Miller, W.J.,** 1977a, Tolerance levels, toxicity of essential trace elements for livestock and poultry, part I, Cattle and sheep: Feedstuffs, v. 49, no. 36, p. 18-20, 34.

504. **Neathery, M.W., and Miller, W.J.,** 1977b, Tolerance levels, toxicity of essential trace elements for livestock and poultry, part II, Swine and poultry: Feedstuffs, v. 49, no. 38, p. 22, 27-28.

505. **Nelson, K.W., and Bundy, S.D.,** 1980, Environmental aspects of selenium and tellurium: Proceedings of the International Symposium on Industrial Uses of Selenium and Tellurium, Toronto, Canada, p. 18-24 [Selenium-Tellurium Development Association, Inc., sponsor].

506. **Neve, J., and Favier, A.,** editors, 1989, Selenium in medicine and biology, Proceedings of the Second International Congress on Trace Elements in Medicine and Biology, March, 1988, Avoriaz, France: Walter de Gruyter, Berlin and New York, 411 p.

507. **Newberne, P.M.,** 1981, Disease states and tissue mineral elements in man: Federation Proceedings, v. 40, no. 8, p. 2134-2137.

508. **Nielsen, F.H.,** 1981, Consideration of trace element requirements for preparation of chemically defined media, *in* Waymouth, C., Ham, R.G., and Chapple, P.J., editors, The growth requirements of vertebrate cells in vitro: Cambridge University Press, p. 68-81.

509. **Nielsen, M.G.,** 1989, Selenium metabolism and availability in rainbow trout, *in* Neve, J., and Favier, A., editors, Selenium in medicine and biology, Proceedings of the Second International Congress on Trace Elements in Medicine and Biology, March, 1988, Avoriaz, France: Walter de Gruyter, Berlin and New York, p. 79-82.

510. **Noda, K., Taniguchi, H., Suzuki, S., and Hirai, S.,** 1983, Comparison of the selenium contents of vegetables of the genus *Allium* measured by fluorometry and neutron activation analysis: Agricultural and Biological Chemistry, v. 47, no. 3, p. 613-615.

511. **Nordenson, I., and Beckman, L.,** 1985, Interaction between some common clastogenic agents, *in* Merian. E., Frei, R. W, Hardi, W., and Schlatter, C., editors, Carcinogenic and mutagenic metal compounds: environmental and analytical chemistry and biological effects: Gordon and Breach Science Publishers, New York, p. 507-511.

512. **North, L.N., Mathias, M.M., and Schatte, C.L.,** 1984, Effect of dietary vitamin E or selenium on prostaglandin dehydrogenase in hyperoxic rat lung: Aviation, Space, and Environmental Medicine, July 1984, p. 617-619.

513. **Nuttall, K.L.**, 1987, A model for metal selenide formation under biological conditions: Medical Hypotheses, v. 24, no. 2, p. 217-221.

514. **Obermeyer, B.D., Palmer, I.S., Olson, O.E., and Halverson, A.W.**, 1971, Toxicity of trimethylselenonium chloride in the rat with and without arsenite: Toxicology and Applied Pharmacology, v. 20, p. 135-146.

515. **O'Brien, P.J.**, 1980, Intracellular mechanisms for lipid peroxide decomposition, *in* Simic, M.G., and Karel, M., editors, Autoxidation in food and biological systems, Proceedings of the Workshop on Autoxidation Processes, U.S. Army Natick Research and Development Command, Natick, Massachusetts, October 29-31, 1979: Plenum Press, New York, p. 563-587.

516. **O'Connor, J.T.**, 1988, The Campbell Creek/No. 2 Gas/Peerless/Powellton Coal Bed correlation from the middle part of the Kanawha Formation of the Central Appalachian Basin: U. S. Geological Survey Circular 1025, p. 39.

517. **Odom, J.D.**, 1983, Selenium biochemistry: chemical and physical studies, *in* Clark, M.J., Goodenough, J.B., Ibers, J.A., Jorgensen, C.K., Neilands, J.B., Reinen, D., Weiss, R., and Williams, R.J.P., editors, Structure and bonding 54, Inorganic elements in biochemistry: Springer-Verlag, New York, p. 1-26.

518. **Oehme, F.W.**, 1978a, Mechanisms of heavy metal inorganic toxicities, *in* Oehme, F.W., editor, Toxicity of heavy metals in the environment, part 1: Marcel Dekker, Inc., New York, p. 69-85.

519. **Oehme, F.W**, 1978, Toxicity of heavy metals in the environment: Marcel Dekker, Inc., New York, 2 volumes, 970 p.

520. **Ogden, P.R., Welsh, S.L., Williams, M.C., and Ralphs, M.H.**, 1988, *Astragalus* and related genera-ecological considerations, *in* James, L.F., Ralphs, M.H., and Nielson, D.B., editors, The ecology and economic impact of poisonous plants in livestock production: Westview Press, Boulder, p. 153-169.

521. **Ohlendorf, H.M., Hothem, R.L., Aldrich, T.W., and Krynitsky, A.J.**, in press, Selenium contamination of the grasslands, a major California waterfowl area: U.S. Fish and Wildlife Service report, accepted for publication in The Science of the Total Environment, 21 p.

522. **Ohlendorf, H.M., Hothem, R.L., Bunck, C.M., Aldrich, T.W., and Moore, J.F.**, 1986, Relationships between selenium concentrations and avian reproduction, *in* McCabe, R.E., editor, Transactions of the Fifty-first North American Wildlife and Natural Resources Conference: Wildlife Management Institute, Washington, D.C., p. 330-342.

523. **Oldfield, J.E.**, 1972, Selenium deficiency in soils and its effect on animal health: Geological Society of America Special Paper 140, p. 57-63.

524. **Oldfield, J.E.**, 1980, Biological uses of selenium: Proceedings of the International Symposium on Industrial Uses of Selenium and Tellurium, Toronto, Canada, p. 299-310 [Selenium-Tellurium Development Association, Inc., sponsor].

525. **Oldfield, J.E.**, 1987, The two faces of selenium: The Journal of Nutrition, v. 117, no. 12, p. 2002-2008.

526. **Olson, O.E.**, 1967, Soil, plant, animal cycling of excessive levels of selenium, *in* Muth, O.H., Oldfield, J.E., and Weswig, P.H., editors, Selenium in biomedicine, First International Symposium: AVI Publishing, Westport, Connecticut, p. 297-312.

527. **Olson, O.E.,** 1976, Methods of analysis for selenium, a review: Proceedings of the Symposium on Selenium-Tellurium in the Environment, University of Notre Dame, Indiana, p. 67-84 [Industrial Health Foundation, Inc., sponsors].

528. **Olson, O.E.,** 1978, Selenium in plants as a cause of livestock poisoning, *in* Keeler, R.F., Van Kampen, K.R., and James, L.F., editors, Effects of poisonous plants on livestock: Academic Press, New York, p. 121-133.

529. **Olson, O.E.,** 1986, Selenium toxicity in animals with emphasis on man: Journal of the American College of Toxicology, v. 5, no. 1, p. 45-70.

530. **Olson, O.E.,** 1986, Toxic effects of selenium on man, *in* Summers, J.B., and Anderson, S.S., editors, Toxic substances in agricultural water supply and drainage, defining the problem, Proceedings of the 1986 Regional Meetings, Denver, Colorado, August 21-23, 1986: U.S. Committee on Irrigation and Drainage, Denver, Colorado, p. 111-119.

531. **Olson, O.E., Cary, E.E., and Allaway, W.H.,** 1976a, Absorption of trimethylselenonium by plants: Agronomy Journal, v. 68, p. 805-809.

532. **Olson, O.E., Cary, E.E., and Allaway, W.H.,** 1976b, Fixation and volatilization by soils of selenium from trimethylselenonium: Agronomy Journal, v. 68, p. 839-843.

533. **Olson, O.E., and Embry, L.B.,** 1973, Chronic selenite toxicity in cattle: Proceedings of the South Dakota Academy of Science, v. 52, p. 50-58.

534. **Olson, O.E., and Frost, D.V.,** 1970, Selenium in papers and tobaccos: Environmental Science and Technology, v. 4, p. 686-687.

535. **Olson, O.E., Hilderbrand, D.C., and Matthees, D.P.,** 1984, Selenium and tellurium, *in* Vercruysse, A., editor, Evaluation of analytical methods in biological systems, techniques and instrumentation in analytical chemistry, v. 4, part B: Hazardous metals in human toxicology: Elsevier, Oxford and New York, p. 307-331.

536. **Olson, O.E., Jornlin, D.F., and Moxon, A.L.,** 1942, The selenium content of vegetation and the mapping of seleniferous soils: Journal of the American Society of Agronomy, v. 34, no. 7, p. 607-615.

537. **Olson, O.E., Novacek, E.J., Whitehead, E.I., and Palmer, I.S.,** 1970, Investigations on selenium in wheat: Phytochemistry, v. 9, p. 1181-1188.

538. **Olson, O.E., and Palmer, I.S.,** 1984, Selenium in foods purchased or produced in South Dakota: Journal of Food Science, v. 49, no. 2, p. 446-452.

539. **Olson, O.E., Palmer, I.S., and Whitehead, E.I.,** 1973, Determination of selenium in biological materials, *in* Glick, D., editor, Methods of biochemical analysis, v. 21: John Wiley & Sons, Inc., New York, p. 39-78.

540. **Oman, C.L., Finkelman, R.B., Coleman, S.L., and Bragg, L.J.,** 1988, Selenium in coal from the Powder River Basin, Wyoming and Montana: U.S. Geological Survey Circular 1025, p. 39-40.

541. **Oppenheimer, J.A., Eaton, A.D., and Kreft, P.H.,** 1985, Speciation of selenium in groundwater: U.S. Environmental Protection Agency Research and Development Project Summary, E.P.A.-600/S2-84-190, 4 p.

542. **Oremland, R.S., and Zehr, J.P.,** 1986, Formation of methane and carbon dioxide from dimethylselenide in anoxic sediments and by a methanogenic bacterium: Applied and Environmental Microbiology, v. 52, no. 5, p. 1031-1036.

543. **Ormrod, D.P.,** 1984, Impact of trace element pollution on plants, *in* Treshow, M., editor, Air pollution and plant life: John Wiley & Sons, Inc., New York, p. 291-319.

544. **Ort, J.F., and Latshaw, J.D.,** 1978, The toxic level of sodium selenite in the diet of laying chickens: The Journal of Nutrition, v. 108, no. 7, p. 1114-1120.

545. **Oster, J.D., Tracy, J., and Meyer, J.L.,** 1987, Hazardous minor element content in irrigation well waters and stock wells in or near the southern Coast Range: Paper presented at the 1987 Research Conference, University of California Salinity and Drainage Task Force, March 6-7, 1987, Woodlake Inn, Sacramento (unpublished), 8 p.

546. **Owen, B.D, Sosulski, F., Wu, K.K., and Farmer, M.J.,** 1977, Variation in mineral content of Saskatchewan feed grains: Canadian Journal of Animal Science, v. 57, p. 679-687.

547. **Owsley, J.A., and McCauley, D.E.,** 1986, Effect of extended sublethal exposure to sodium selenite on *Ceriodaphnia affinis*: Bulletin of Environmental Contamination and Toxicology, v. 36, no. 6, p. 876-880.

548. **Pahlavanpour, B., Pullen, J.H., and Thompson, M.,** 1980, Determination of trace concentrations of selenium in soils and sediments by the introduction of hydrogen selenide into an inductively coupled plasma source for emission spectrometry: Analyst, v. 105, no. 1248, p. 274-278.

549. **Pal, B.,** 1975, Selenium in livestock nutrition: Journal of Applied Nutrition, v. 27, p. 6-8.

550. **Palmer, I.S., Fischer, D.D., Halverson, A.W., and Olson, O.E.,** 1969, Identification of a major selenium excretory product in rat urine: Biochimica et Biophysica Acta, v. 177, p. 336-342.

551. **Palmer, I.S., Gunsalus, R.P., Halverson, A.W., and Olson, O.E.,** 1970, Trimethylselenonium ion as a general excretory product from selenium metabolism in the rat: Biochimica et Biophysica Acta, v. 208, p. 260-266.

552. **Palmer, I.S., Herr, A. and Nelson, T.,** 1982a, The effect of bromobenzene administration on selenium excretion in rats: Proceedings of the South Dakota Academy of Sciences, v. 61, p. 37-44.

553. **Palmer, I.S., Herr, A., and Nelson, T.,** 1982b, Toxicity of selenium in brazil nuts to rats: Journal of Food Science, v. 47, p. 1595-1597.

554. **Palmer, I.S., and Olson, O.E.,** 1974, Relative toxicities of selenite and selenate in the drinking water of rats: The Journal of Nutrition, v. 104, p. 306-314.

555. **Palmer, I.S., and Olson, O.E.,** 1979, Partial prevention by cyanide of selenium poisoning in rats: Biochemical and Biophysical Research Communications, v. 90, no. 4, p. 1379-1386.

556. **Palmer, I.S., and Olson, O.E.,** 1981, Effect of cyanide on selenium status in rats fed low selenium diets: Nutrition Reports International, v. 24, no. 4, p. 635-641.

557. **Palmer, I.S., Olson, O.E., Halverson, A.W., Miller, R., and Smith, C.,** 1980, Isolation of factors in linseed oil meal protective against chronic selenosis in rats: The Journal of Nutrition, v. 101, no. 1, p. 145-150.

558. **Palmer, I.S., Olson, O.E., Ketterling, L.M., and Shank, C.E.,** 1983, Selenium intake and urinary excretion in persons living near a high selenium area: Journal of the American Dietetic Association, v. 82, no. 5, p. 511-515.

559. **Palmer, I.S., Thiex, N., and Olson, O.E.,** 1983, Dietary selenium and arsenic effects in rats: Nutrition Reports International, v. 27, no. 2, p. 249-257.

560. **Parizek, J.,** 1987, Dose-response aspects of selenium in nutritional toxicology, *in* Combs, G. F., Jr., Spallholz, J. E., Levander O. A., and Oldfield, J. E., editors, Selenium in biology and medicine, part A, Proceedings of the Third International Symposium, Beijing, 1984: AVI Book, Van Nostrand Reinhold Company, New York, p. 66-77.

561. **Parizek, J., Kalouskova, J., Babicky, A., Benes, J., and Pavlik, L.,** 1974, Interaction of selenium with mercury, cadmium, and other toxic metals, *in* Hoekstra, W.G., Suttie, J.W., Ganther, H.E., and Mertz, W., editors, Trace element metabolism in animals-2, Proceedings of the Second International Symposium on Trace Element Metabolism in Animals, University of Wisconsin, Madison, Wisconsin: University Park Press, Baltimore, p. 119-131.

562. **Parizek, J., Kalouskova, J., Benes, J., and Pavlik, L.,** 1980, Interactions of selenium-mercury and selenium-selenium compounds: Annals of the New York Academy of Sciences, v. 355, p. 347-360.

563. **Parizek, J., Ostadalova, I., Kalouskova, J., Babicky, A., and Benes, J.,** 1971, The detoxifying effects of selenium, interrelations between compounds of selenium and certain metals, *in* Mertz, W., and Cornatzer, W.E., editors, Newer trace elements in nutrition, Proceedings of the International Symposium on the Newer Trace Elements in Nutrition: Marcel Dekker, Inc., New York, p. 85-122.

564. **Passwater, R.A., and Cranton, E. M.,** 1983, Trace elements, hair analysis and nutrition: Keats Publishing, Inc., New Canaan, Connecticut, 385 p.

565. **Patraw, J.M.,** 1963, A study of the distribution of selenium in the Niobrara Formation of western South Dakota: M.S. thesis, South Dakota School of Mines and Technology, Rapid City, 65 p.

566. **Peterson, D.A., Jones, W.E., and Morton, A.G.,** 1988, Reconnaissance investigation of water quality, bottom sediment, and biota associated with irrigation drainage in the Kendrick Reclamation Project area, Wyoming, 1986-87: U.S. Geological Survey Water-Resources Investigations Report 87-4255, 57 p.

567. **Peterson, P.J., Benson, L.M., and Zieve, R.,** 1981, Metalloids, *in* Lepp, N.W., editor, Effect of heavy metal pollution on plants, v. 1: Effects of trace metals on plant function: Applied Science Publishers, London and New Jersey, p. 279-342.

568. **Peterson, P.J., Girling, C.A., Klumpp, D.W., and Minski, M.J.,** 1979, An appraisal of neutron activation analysis and other analytical techniques for the determination of arsenic, selenium and tin in environmental samples, *in* Nuclear activation techniques in the life sciences, Proceedings of an International Symposium on Nuclear Activation Techniques in the Life Sciences, International Atomic Energy Agency [I.A.E.C.], Vienna, May 22-26, 1978: I.A.E.C., Vienna, p. 103-114.

569. **Peterson, S.R., and Gee, G.W.,** 1985, Interactions between acidic solutions and clay liners: permeability and neutralization, *in* Johnson, A.I., Frobel, R.K., Cavalli, N.J., and Pettersson, C.B., editors, Hydraulic barriers in soil and rock: ASTM Special Technical Publication 874: Philadelphia, Pennsylvania, p. 229-245.

570. **Petterson, D.S., Casey, R.H., Masters, H.G., and Wilson, P.E.,** 1985, Observations on intraruminal glass pellets for trace mineral supplementation of sheep, *in* Mills, C.F., Bremner, I., and Chesters, J.K., editors, Trace elements in man and animals, Proceedings of the Fifth International Symposium on Trace Elements in Man and Animals: Commonwealth Agricultural Bureaux, Scotland, p. 722-725.

571. **Phillips, G. R., Medvick, P.A., Skaar, D.R., and Knight, D.E.,** 1987, Factors affecting the mobilization, transport, and bioavailability of mercury in reservoirs of the Upper Missouri River Basin: U.S. Fish and Wildlife Service Technical Report 10, 64 p.

572. **Pineau, A.,** 1989, Selenium toxicology, *in* Neve, J., and Favier, A., editors, Selenium in medicine and biology, Proceedings of the Second International Congress on Trace Elements in Medicine and Biology, March, 1988, Avoriaz, France: Walter de Gruyter, Berlin and New York, p. 345-349.

573. **Poulet, R.J.,** 1972, Perfluoroalkyl derivatives of the main group elements, *in* Gutmann, V., editor, MTP international review of science, main group elements group VII and noble gasses, Inorganic chemistry series one, v. 3: University Park Press, Baltimore, p. 127-140.

574. **Prasad, A.S.,** 1978, Selenium, *in* Prasad, A.S., editor, Trace elements and iron in human metabolism: Plenum Medical Book Company, New York, p. 215-250.

575. **Presser, T.S., and Barnes, I.,** 1984, Selenium concentrations in waters tributary to and in the vicinity of the Kesterson National Wildlife Refuge, Fresno and Merced Counties, California: U.S. Geological Survey Water Resources Investigations Report 84-4122, 26 p.

576. **Presser, T.S., Barnes, I.,** 1985, Dissolved constituents including selenium in waters in the vicinity of Kesterson National Wildlife Refuge and the west grassland, Fresno and Merced Counties, California: U.S. Geological Survey Water Resources Investigations Report 85-4220, 73 p.

577. **Presser, T.S., and Ohlendorf, H.M.,** 1987, Biogeochemical cycling of selenium in the San Joaquin Valley, California, U.S.A.: Environmental Management, v. 11, no. 6, p. 805-821.

578. **Prien, O.L., and Raiford, L.C.,** 1911, Woody aster: University of Wyoming, Wyoming Experiment Station Preliminary Bulletin No. 88, 20 p.

579. **Prohaska, J.R.,** 1983, Neurochemical aspects of selenium, *in* Dreosti, I.E., and Smith, R.M., editors, Neurobiology of the trace elements, v. 1, Trace element neurobiology and deficiencies: Humana Press, Clifton, New Jersey, p. 245-268.

580. **Rabjohn, N.,** 1976, Selenium dioxide oxidation, *in* Dauben, W.G., and others, editors, Organic reactions, v. 24: John Wiley & Sons, Inc., New York, p. 261-415.

581. **Radtke, D.B., Kepner, W.G., and Effertz, R.J.,** 1988, Reconnaissance investigation of water quality, bottom sediment, and biota associated with irrigation drainage in the Lower Colorado River Valley, Arizona, California, and Nevada, 1986-87: U.S. Geological Survey Water-Resources Investigation Report 88-4002, 77 p.

582. **Rai, D.,** 1987, Inorganic and organic constituents in fossil fuel combustion residues, v. 1: a critical review: EPRI Report EA-5176, v. 1, Research Project 2485-8, prepared by Battelle, Pacific Northwest Laboratories for the Electric Power Research Institute, Palo Alto, California, 362 p.

583. **Rai, D.,** 1987, Inorganic and organic constituents in fossil fuel combustion residues, v. 2: an annotated bibliography: EPRI Report EA-5176, v. 2, Research Project 2485-8, prepared by

Battelle, Pacific Northwest Laboratories for the Electric Power Research Institute, Palo Alto, California, 89 p.

584. **Rai, D., and Zachara, J.M.,** 1984, Chemical attenuation rates, coefficients, and constants in leachate migration, v. 1: a critical review, EPRI Report EA-3356, v. 1, Research Project 2198-1, prepared by Battelle, Pacific Northwest Laboratories for the Electric Power Research Institute, Palo Alto, California, 320 p.

585. **Rai, D., Zachara, J.M., Schmidt, R.A., and Schwab, A.P.,** 1984, Chemical attenuation rates, coefficients, and constants in leachate migration, v. 2: an annotated bibliography: EPRI Report EA-3356, v. 2, Research Project 2198-1, prepared by Battelle, Pacific Northwest Laboratories for the Electric Power Research Institute, Palo Alto, California, 176 p.

586. **Rail, C.D., and Hadley, W.M.,** 1976, Selenium in water...an overview: Journal of Environmental Health, v. 39, no. 3, p. 173-175.

587. **Ralphs, M.H., and Sharp, L.A.,** 1988, Management to reduce livestock loss from poisonous plants, *in* James, L.F., Ralphs, M.H., and Nielsen, D.B., editors, The ecology and economic impact of poisonous plants on livestock production: Westview Press, Boulder, p. 391-405.

588. **Raptis, S.E., Kaiser, G., and Tolg, G.,** 1983: A survey of selenium in the environment and a critical review of its determination at trace levels: Fresenius Zeitschrit fur Analytische Chemie, v. 316, no. 2, p. 105-123.

589. **Rea, H.M., McKenzie, R.L., Thomson, C.D., and Robinson, M.F.,** 1977, Selenium and glutathione peroxidase status of New Zealand subjects, *in* Trace elements in human and animal health in New Zealand: Waikato University Press, Hamilton, New Zealand, p. 90 [abstract].

590. **Reading, J.T., and Buikema, A.L., Jr.,** 1983, Chronic effects of selenite-selenium on *Daphnia pulex*: Archives of Environmental Contamination and Toxicology, v. 12, no. 4, p. 399-404.

591. **Reddy, C.C., and Massaro, E.J.,** 1983, Biochemistry of selenium: a brief overview: Fundamental and Applied Toxicology, v. 3, no. 5, p. 431-436.

592. **Reddy, C.C., Thomas, C.E., and Scholz, R.W.,** 1985, Inadequate vitamin E and selenium nutrition, effect on enzymes associated with hydroperoxide metabolism, *in* Finley, J.W., and Schwass, D.E., editors, Xenobiotic metabolism: nutritional effects: American Chemical Society [ACS] Symposium Series 277, Washington D.C., p. 253-265.

593. **Ren, J.-Z., Zhou, Z.-Y., Pan, B., and Chen, W.,** 1987, Selenium distribution in four grassland classes of China, *in* Combs, G.F., Jr., Spallholz, J.E., Levander, O.A., and Oldfield, J.E., editors, Selenium in biology and medicine, part B, Proceedings of the Third International Symposium, Beijing, 1984: AVI Book, Van Nostrand Reinhold Company, New York, p. 769-774.

594. **Rickaby, C.D.,** 1981, The selenium requirement of ruminants, *in* Haresign, W., editor, Recent advances in animal nutrition: Butterworth Publishing, Sevenoaks, U.K., p. 121-128.

595. **Rigdon, R.H., Crass, G., and McConnell, K.P.,** 1953, Inhibition of maturation of duck erythrocytes by sodium selenite: the counteraction of this effect by cysteine: American Medical Association Archives of Pathology, v. 56, p. 374-385.

596. **Ringdal, O., and Julshamn, K.,** 1985, Effect of selenite on the uptake of methylmercury in cod (*Gadus morhua*): Bulletin of Environmental Contamination and Toxicology, v. 35, no. 3, p. 335-344.

597. **Robb, P., Williams. D.R., and McWeeny, D.J.,** 1985, Chemical speciation in vegetable protein digests - a computerized approach, *in* Mills, C.F., Bremner, I, and Chesters, J.K., editors, Trace elements in man and animals-5, Proceedings of the Fifth International Symposium on Trace elements in man and animals: Commonwealth Agricultural Bureaux, Scotland, p. 630-632.

598. **Robberecht, H.J., and Deelstra, H.A.,** 1984a, Selenium in human urine: concentration levels and medical implications: Clinica Chimica Acta, v. 136, p. 107-120.

599. **Robberecht, H.J., and Deelstra, H.A.,** 1984b, Selenium in human urine: determination, speciation and concentration levels: Talanta, v. 31, no. 7, p. 497-508.

600. **Robberecht, H.J., Roekens, E., Van Calillie-Bertrand, M., Deelstra, H., and Clara, R.,** 1985, Longitudinal study of the selenium content in human breast milk in Belgium: Acta Paediatr Scand, v. 74, p. 254-258.

601. **Robberecht, H.J., and Van Grieken, R.,** 1982, Selenium in environmental waters: determination, speciation and concentration levels: Talanta, v. 29, p. 823-844.

602. **Robinson, M.F.,** 1982, Clinical effects of selenium deficiency and excess, *in* Prasad, A.S., editor, Current topics in nutrition and disease, v. 6: Clinical, biochemical, and nutritional aspects of trace elements: Alan R. Liss, Inc., New York, p. 325-343.

603. **Robinson, M.F., Thomson, C.D., Stewart, R.D.H., Rea, H.M., and McKenzie, R.L.,** 1978, Selenium in human nutrition in New Zealand residents, *in* Kirchgessner, M., editor, Trace element metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic of Germany: Institut fur Ernahrungsphysiologie, Technische Universitat Munchen, Freising-Weihenstephan, p. 316-319.

604. **Rosenfeld, I.,** 1962a, Biochemical and chemical studies on Astragalus leaves and roots: University of Wyoming Agricultural Experiment Station Bulletin 385, 43 p.

605. **Rosenfeld, I.,** 1962b, Effect of selenium on methionine formation *in vivo* and *in vitro*: Proceedings of the Society for Experimental Biology and Medicine, v. 109, p. 624-628.

606. **Rosenfeld, I., and Beath, O.A.,** 1945, The elimination and distribution of selenium in the tissues in experimental selenium poisoning: The Journal of Nutrition, v. 30, no. 6, p. 443-449.

607. **Rosenfeld, I., and Beath, O.A.,** 1946, The influence of protein diets on selenium poisoning II. The chemical changes in the tissues following selenium administration: American Journal of Veterinary Research, v. 7, no. 22, p. 57-61.

608. **Rosenfeld, I., and Beath, O.A.,** 1947, Congenital malformations of eyes of sheep: Journal of Agricultural Research, v. 75, no. 3, p. 93-103.

609. **Rosenfeld, I., and Beath, O.A.,** 1948a, Experimentally developed telangiectasis and sawdust liver lesions in rats: Journal of the American Veterinary Medical Association, v. 112, no. 854, p. 386-389.

610. **Rosenfeld, I., and Beath, O.A.,** 1948b, Metabolism of sodium selenate and selenite by the tissues: The Journal of Biological Chemistry, v. 172, no. 1, p. 333-341.

611. **Rosenfeld, I., and Beath, O.A.,** 1954, Effect of selenium on reproduction in rats: Proceedings of the Society for Experimental Biology and Medicine, v. 87, p. 295-297.

612. **Rosenfeld, I., and Beath, O.A.,** 1964, Selenium: geobotany, biochemistry, toxicity, and nutrition: Academic Press, New York and London, 411 p.

613. **Rosenfeld, I., and Eppson, H.F.,** 1957, Effect of choline deficiency on chronic selenium poisoning of rats: American Journal of Veterinary Research, v. 18, no. 68, p. 693-697.

614. **Russell, D. McR., Tsailas, G., Pipa, D.A., and Jeejeebhoy, K.N.,** 1983, Trace elements in parenteral nutrition, *in* Sarkar, B., editor, Biological aspects of metals and metal-related diseases: Raven Press, New York, p. 121-132.

615. **Russell, L. H., Jr.,** 1978, Heavy metals in foods of animal origin, *in* Oehme, F.W., editor, Toxicity of heavy metals in the environment: Marcel Dekker, Inc., New York, p. 3-23.

616. **Saiki, A., Turner, M., Patalas, K., Rudd, J., and Findlay, D.,** 1985, The influence of fish-zooplankton-phytoplankton interactions on the results of selenium toxicity experiments within large enclosures: Canadian Journal of Fisheries and Aquatic Sciences, v. 42, no. 6, p. 1132-1143.

617. **Sandstead, H.H., Burk, R.F., Booth, G.H., and Darby, W.J.,** 1970, Current concepts on trace minerals: clinical considerations: Medical Clinics of North America, v. 54, no. 6, p. 1509-1531.

618. **San Joaquin River Basin Technical Committee,** 1987, Regulation of agricultural drainage to the San Joaquin River: Final report, SWRCB Order No. W.Q. 85-1, [California] State Water Resources Control Board, 324 p.

619. **San Joaquin Valley Drainage Program,** 1986, Directory: San Joaquin Valley Drainage Program (unpublished Directory of program participants), 44 p.

620. **San Joaquin Valley Drainage Program,** 1987, Developing options: an overview of efforts to solve agricultural drainage and drainage related problems in the San Joaquin Valley: San Joaquin Valley Drainage Program (unpublished Directory of program participants), 28 p.

621. **San Joaquin Valley Drainage Program,** 1988, Agricultural drainage in California's San Joaquin Valley: selected U.S. Fish and Wildlife Service publications: San Joaquin Valley Drainage Program (unpublished bibliography), 7 p.

622. **Sarathchandra, S.U. and Watkinson, J.H.,** 1981, Oxidation of elemental selenium to selenite by *Bacillus megaterium*: Science, v. 211, p. 600-601.

623. **Sato, T., Ose, Y., and, Sakai, T.,** Toxicological effect of selenium on fish: Environmental Pollution, Series A, v. 21, p. 217-224.

624. **Scannell, J.P., and Pruess, D.L.,** 1974, Naturally occurring amino acid and oligopeptide antimetabolites, *in* Weinstein, B., editor, Chemistry and biochemistry of amino acids, peptides, and proteins, a survey of recent developments, v. 3: Marcel Dekker, Inc., New York, p. 189-244.

625. **Schelenz, R.F.W., and Harmuth-Hoene, A. E.,** 1985, Dietary intakes of Zn, Fe, Cu, and Se by adult females: a total diet study, *in* Mills, C.F., Bremner, I, and Chesters, J.K., editors, Trace elements in man and animals-5, Proceedings of the Fifth International Symposium on Trace Elements in Man and Animals: Commonwealth Agricultural Bureaux, Scotland, p. 620-622.

626. **Schrauzer, G.N.,** 1979a, Klaus Schwarz 1914-1978, commemoration of a leader in trace element research, *in* Kharasch, N., editor, Trace metals in health and disease: Raven Press, New York, p. 251-261.

627. **Schrauzer, G.N.,** 1979b, Trace elements in carcinogenesis, *in* Draper, H.H., editor, Advances in nutritional research, v. 2: Plenum Press, New York, p. 219-244.

628. **Schrauzer, G.N.,** 1984, The discovery of the essential trace elements: an outline of the history of biological trace element research, *in* Frieden, E., editor, Biochemistry of the essential ultratrace elements: Plenum Press, New York and London, p. 17-31.

629. **Schrauzer, G.N., White, D.A., and Schneider, C.J.,** 1978, Effects of selenium, arsenic and zinc on the genesis of spontaneous mammary tumors in inbred female C_3H mice, *in* Kirchgessner, M., Trace element metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic of Germany: Institut fur Ernahrungsphysiologie, Technische Universitat Munchen, Freising-Weihenstephan, p. 387-390.

630. **Schroeder, R.A., Palawski, D.U., and Skorupa, J.P.,** 1988, Reconnaissance investigation of water quality, bottom sediment, and biota associated with irrigation drainage in the Tulare Lake Bed area, Southern San Joaquin Valley, California, 1986-87: U.S. Geological Survey Water-Resources Investigation Report 88-4001, 86 p.

631. **Schubert, A., Holden, J.M., and Wolf, W.R.,** 1987, Selenium content of a core group of foods based on a critical evaluation of published analytical data: Journal of the American Dietetic Association, v. 87, no. 3, p. 285-299.

632. **Schwarz, K.,** 1976, Essentiality and metabolic functions of selenium: Medical Clinics of North America, v. 60, no. 4, p. 745-758.

633. **Schwarz, K., and Mertz, W.,** 1960, Physiological effects of trace amounts of selenium: Proceedings of a Conference on Physiological Aspects of Water Quality, September 8-9, 1960, Washington D.C., p. 79-104.

634. **Scott, M.L.,** 1969, Antioxidants, selenium and sulfur amino acids in the vitamin E nutrition of chicks, *in* Cuthbertson, D., editor, Nutrition of animals of agricultural importance, v. 2: Pergamon Press, Oxford and New York, p. 1181-1202.

635. **Scott, M.L.,** 1971, Role of selenium as an essential nutrient, *in* Mertz, W., and Cornatzer, W.E., editors, International Symposium on the Newer Trace elements in nutrition, Grand Forks, North Dakota, 1970: Marcel Dekker, Inc., New York, p. 51-56.

636. **Scott, M.L.,** 1973, The selenium dilemma: The Journal of Nutrition, v. 103, no 6, p. 803-810.

637. **Scott, M.L.,** 1977, Nutritional and biochemical aspects of selenium in poultry: Feedstuffs, v. 49, no. 22, p. 19-20.

638. **Searight, W.V.,** 1937, Lithologic stratigraphy of the Pierre Formation of the Missouri Valley in South Dakota: South Dakota State Geological Survey Report of Investigations No. 27, 63 p.

639. **Searight, W.V., Moxon, A.L., Whitehead, E.I., and Viets, F.G., Jr.,** 1947, Detailed mapping of seleniferous vegetation on soils of Pierre origin: Proceedings of the South Dakota Academy of Science, v. 26, p. 87-97.

640. **Seawright, A.A., Hegarty, M.P., James, L.F., and Keeler, R.F.,** editors, 1985, Plant toxicology: proceedings of the Australia-USA Poisonous Plants Symposium, Brisbane, Australia, May 14-18, 1984: Queensland Poisonous Plants Committee, Queensland Department of Primary Industries, Animal Research Institute, Yeerongpilly, 625 p.

641. **Senesi, N., Polemio, M., and Lorusso, L.,** 1979, Content and distribution of arsenic, bismuth, lithium and selenium in mineral and synthetic fertilizers and their contribution to soil: Communications in Soil Science and Plant Analysis, v. 10, no. 8, p. 1109-1126.

642. **Shacklette, H.T., Boerngen, J.G., and Keith, J.R.,** 1974, Selenium, fluorine, and arsenic in surficial materials of the conterminous United States: U.S. Geological Survey Circular 692, 14 p.

643. **Shacklette, H.T., Erdman, J.A., Harms, T.F., and Papp, C.S.E.,** 1978, Trace elements in plant foodstuffs, *in* Oehme, F.W., editor, Toxicity of heavy metals in the environment Marcel Dekker, Inc., New York, p. 25-68.

644. **Shamberger, R.J.,** 1978a, Antioxidants and cancer VIII. Cadmium -selenium levels in kidneys, *in* Kirchgessner, M., editor, Trace element metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic of Germany: Institut fur Ernahrungsphysiologie, Technische Universitat Munchen, Freising-Weihenstephan, p. 391-392.

645. **Shamberger, R.J.,** 1978b, Beneficial effects of trace elements, *in* Oehme, F.W., editor, Toxicity of heavy metals in the environment Marcel Dekker, Inc., New York, p. 689-796.

646. **Shamberger, R.J.,** 1980a, Evidence for the antimutagenicity and the mutagenicity of selenium: Biological Trace Element Research, v. 2, no. 1, p. 81-88.

647. **Shamberger, R.J.,** 1980b, Is peroxidation important in the cancer process, *in* Simic, M.G., and Karel, M., editors, Autoxidation in food and biological systems, Proceedings of the Workshop on Autoxidation Processes, U.S. Army Natick Research and Development Command, Natick, Massachusetts, October 29-31, 1979: Plenum Press, New York, p. 639-649.

648. **Shamberger, R.J.,** 1984, Selenium, *in* Frieden, E., editor, Biochemistry of the essential ultratrace elements: Plenum Press, New York, p. 201-237.

649. **Shamberger, R.J.,** 1985, The genotoxicity of selenium: Mutation Research, v. 154, no. 1, p. 29-48.

650. **Shamberger, R.J.,** 1986a, Medical implications of selenium biochemistry: Trace Elements in Medicine, v. 3, no. 3, p. 105-111.

651. **Shamberger, R.J.,** 1986b, Selenium metabolism in man and animals, *in* Xavier, A.V., editor, Frontiers in bioinorganic chemistry: VCH, Germany, p. 152-159.

652. **Shamberger, R.J., and Willis, C.W.,** 1971, Selenium distribution and human cancer mortality: CRC Critical Reviews in Clinical Laboratory Sciences, Cleveland, Ohio, p. 211-221.

653. **Sharma, S.,** 1984, Selenium research in India: International Journal of Environmental Studies, v. 22, p. 231-240.

654. **Sharma, S., and Singh, R.,** 1983, Selenium in soil, plant, and animal systems: CRC Critical Reviews in Environmental Control, v. 13, Issue 1, p. 23-50.

655. **Sharma, S., Singh, R., and Bhattacharyya, A.K.,** 1981, Perspective of selenium research in soil-plant-animal system in India: Fertiliser News, v. 26, no. 3, p. 19-28.

656. **Shear, H.,** 1984, Contaminants research and surveillance - a biological approach, *in* Nriagu, J.O., and Simmons, M.S., editors, Toxic contaminants in the Great Lakes, v. 14 *of* the Wiley series on advances in environmental science and technology: John Wiley & Sons, Inc., New York, p. 31-51.

657. **Shearer, T.R.,** 1974, Changes in eating and drinking behavior of rats caused by selenium, *in* Hoekstra, W.G., Suttie, J.W., Ganther, H.E., and Mertz, W., editors, Trace element metabolism in animals-2, Proceedings of the Second International Symposium on Trace Element Metabolism in Animals, University of Wisconsin, Madison, Wisconsin: University Park Press, Baltimore, p. 590-592.

658. **Shearer, T.R., and Hadjimarkos, D.M.,** 1975, Geographic distribution of selenium in human milk: Archives of Environmental Health, v. 30, p. 230-233.

659. **Sheffy, B.E., and Schultz, R.D.,** 1979, Influence of vitamin E and selenium on immune response mechanisms: Federation Proceedings, v. 38, no. 7, p. 2139-2143.

660. **Shendrikar, A.D.,** 1974, Critical evaluation of analytical methods for the determination of selenium in air, water, and biological materials: The Science of the Total Environment, v. 3, no. 2, p. 155-168.

661. **Shepherd, L., and Huber, R.E.,** 1969, Some chemical and biochemical properties of selenomethionine: Canadian Journal of Biochemistry, v. 47, no. 9, p. 877-881.

662. **Shorrocks, V.M.,** 1987, Recent developments regarding boron, copper, iron, manganese, molybdenum, selenium and zinc, *in* The United Nations, editors, The utilization of secondary and trace elements in agriculture: Martinus Nijhoff Publishers, Boston and Lancaster, p. 270-290.

663. **Shrift, A.,** 1969, Aspects of selenium metabolism in higher plants: Annual Review of Plant Physiology, v. 20, p. 475-494.

664. **Shrift, A.,** 1972, Selenium toxicity, *in* Harborne, J.B., editor, Phytochemical ecology, Proceedings of the Phytochemical Society Symposium, 1971 meeting: Academic Press, London, p. 145-161.

665. **Shrift, A.,** 1973, Metabolism of selenium by plants and microorganisms, *in* Klayman, D.L., and Gunther, W.H.H., editors, organic selenium compounds: their chemistry and biology: John Wiley & Sons, Inc., New York and London, p. 763-814.

666. **Simmingskold, B.,** 1984, Selenium in the container and art glass industry: Proceedings of the Third International Symposium on Industrial Uses of Selenium and Tellurium, Stockholm, Sweden, p. 275-278 [Selenium-Tellurium Development Association, Inc., sponsors].

667. **Singh, M., Singh, N., and Bhandari, D.K.,** 1980, Interaction of selenium and sulfur on the growth and chemical composition of raya: Soil Science, v. 129, no. 4, p. 238-244.

668. **Singh, M., Singh, N., and Relan, P.S.,** 1981, Adsorption and desorption of selenite and selenate selenium on different soils: Soil Science, v. 132, no. 2, p. 134-141.

669. **Singh, B.R., and Steinnes, E.,** 1976, Uptake of trace elements by barley in zinc-polluted soils, 2, Lead, cadmium, mercury, selenium, arsenic, chromium, and vanadium in barley: Soil Science, v. 121, no. 1, p. 38-43.

670. **Skerfving, S.,** 1978, Interaction between selenium and methylmercury: Environmental Health Perspectives, v. 25, p. 57-65.

671. **Smart, M.E., Gudmundson, J., and Christensen, D.A.,** 1981, Trace mineral deficiencies in cattle: a review: Canadian Veterinary Journal, v. 22, no. 12, p. 372-376.

672. **Smith, B.L., and Towers, N.R.,** 1985, Pithmycotoxicosis (facial eczema) in New Zealand and the use of zinc salts for its prevention, *in* Seawright, A.A., Hegarty, M.P., James, L.F., and Keeler, R.F., editors, Plant toxicology, Proceedings of the Australia-USA Poisonous Plants Symposium, Brisbane, Australia, May 14-18, 1984: Queensland Poisonous Plants Committee, Queensland Department of Primary Industries, Animal Research Institute, Yeerongpilly, p. 70-79.

673. **Smith, C.R., Jr., Weisleder, D., Miller, R.W., Palmer, I.S., and Olson, O.E.,** 1980, Linustatin and neolinustatin: cyanogenic glycosides of linseed meal that protect animals against selenium toxicity: Journal of Organic Chemistry, v. 45, p. 507-510.

674. **Smith, F.E.,** 1985, Selenium in the grasslands area, San Joaquin Valley, California: U.S. Fish and Wildlife Service Discussion Paper (unpublished), 39 p.

675. **Smith, F.E.,** 1986, Agricultural Wastewater and the Public Trust: U.S. Fish and Wildlife Service Discussion Paper (unpublished), 52 p.

676. **Smith, J.C., Jr., Anderson, R.A., Ferretti, R., Levander, O.A., Morris, E.R., Roginski, E.R., Veillon, C., Wolf, W.R., Anderson, J.J.B., and Mertz, W.,** 1981, Evaluation of published data pertaining to mineral composition of human tissue: Federation Proceedings, v. 40, no. 8, p. 2120-2125.

677. **Smith, M.I., Franke, K.W., and Westfall, B.B.,** 1936: The selenium problem in relation to public health: U.S. Public Health Service Public Health Reports, v. 51, part 2, numbers 27-52, p. 1496-1505.

678. **Smith, M.I., and Westfall, B.B.,** 1937, Further field studies on the selenium problem in relation to public health: U.S. Public Health Service Public Health Reports, v. 52, part 2, numbers 27-53, p. 1375-1384.

679. **Smith, Norwin,** 1975, Selenium determination from Sweitzer Lake samples: Colorado Department of Natural Resources, Division of Wildlife (unpublished), 5 p.

680. **Smith, R.M.,** 1985, Biochemical criteria of [trace element] deficiency and toxicity, *in* Mills, C.F., Bremner, I, and Chesters, J.K., editors, Trace elements in man and animals-5, Proceedings of the Fifth International Symposium on Trace Elements in Man and Animals: Commonwealth Agricultural Bureaux, Scotland, p. 567-575.

681. **Smith, V.R.,** 1979, A comparison between the H2SO4-H2O2-Li2SO4-Se oxidation method and alternative digestion procedures for plant nutrient analysis: Communications in Soil Science and Plant Analysis, v. 10, no. 7, p. 1067-1077.

682. **Soda, K., Esaki, N., Nakamura, T., Chocat, P., and Tanaka, H.,** 1985, A unique enzyme participating in selenocysteine metabolism, *in* Mills, C.F., Bremner, I, and Chesters, J.K., editors, Trace elements in man and animals-5, Proceedings of the Fifth International Symposium on Trace Elements in Man and Animals: Commonwealth Agricultural Bureaux, Scotland, p. 100-104.

683. **Soltanpour, P.N., Olsen, S.R., and Goos, R.J.,** 1982, Effect of nitrogen fertilization of dryland wheat on grain selenium concentration: Soil Science Society of America Journal, v. 46, no. 2, p. 430-433.

684. **Soltanpour, P.N. and Workman, S.M.,** 1980, Use of NH_4HCO_3-DTPA soil test to assess availability and toxicity of selenium to alfalfa plants: Communications in Soil Science and Plant Analysis, v. 11, no. 12, p. 1147-1156.

685. **Sorensen, E.M.B., and Bauer, T.L.,** 1984a, A correlation between selenium accumulation in sunfish and changes in condition factor and organ weight: Environmental Pollution, Series A, v. 34, p. 357-366.

686. **Sorensen, E.M.B., and Bauer, T.L.,** 1984b, Planimetric analysis of redear sunfish (*Lepomis Microlophus*) hepatopancreas following selenium exposure: Environmental Toxicology and Chemistry, v. 3, p. 159-165.

687. **Sorensen, E.M.B., Bell, J.S., and Harlan, C.W.,** 1983, Histopathological changes in selenium-exposed fish: The American Journal of Forensic Medicine and Pathology, v. 4, no. 2, p. 111-122.

688. **Sorensen, E.M.B., Cumbie, P.M., Bauer, T.L., Bell, J.S., and Harlan, C.W.,** 1984, Histopathological, hematological, condition-factor, and organ weight changes associated with selenium accumulation in fish from Belews Lake, North Carolina: Archives of Environmental Contamination and Toxicology, v. 13, p. 153-162.

689. **Sorg, T.J., and Logsdon, G.S.,** 1976, Removal of selenium from water - state of the art: Proceedings of the Symposium on Selenium-Tellurium in the Environment, University of Notre Dame, Indiana, p. 114-128 [Industrial Health Foundation, Inc., sponsor].

690. **Sorg, T.J., and Logsdon, G.S.,** 1978, Treatment technology to meet the interim primary drinking water regulations for inorganics: part 2: Journal of the American Water Works Association, v. 70, no. 7, p. 379-393.

691. **Spais, A.G.,** Papasteriadis, A., Roubies, N, Agiannidis, A., Yantzis, N., and Argyroudis, S., 1978, Studies on iron, manganese, zinc, copper, and selenium retention and interaction in horses, *in* Kirchgessner, M., Trace element metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic of Germany: Institut fur Ernahrungsphysiologie, Technische Universitat Munchen, Freising-Weihenstephan, p. 501-505.

692. **Spallholz, J.E., Martin, J.L., and Ganther, H.E.,** 1981, Selenium in Biology and Medicine: AVI Publishing Company, Westport, Connecticut, 573 p.

693. **Stadtman, T.C.,** 1977, Biological function of selenium: Nutrition Reviews, v. 35, no. 7, p. 161-166.

694. **Stadtman, T.C.,** 1979, Some selenium-dependent biochemical processes: Advances in Enzymology and Related Areas of Molecular Biology, v. 48, p. 1-28.

695. **Stadtman, T.C.,** 1980a, Biological functions of selenium: Trends in Biochemical Sciences, v. 5, no. 8, p. 203-206.

696. **Stadtman, T.C.,** 1980b, Selenium-dependent enzymes: Annual Review of Biochemistry, v. 49, p. 93-110.

697. **Stadtman, T.C., Cone, J.E., Jones, J.B., Martin del Rio, R., and Seto, B.,** 1976, Selenoenzymes of bacteria: Proceedings of the Symposium on Selenium-Tellurium in the Environment, University of Notre Dame, Indiana, p. 226-233 [Industrial Health Foundation, Inc., sponsor].

698. **Stadtman, T.C., Dilworth, G.L., and Chen, C.-S.,** 1981, Selenium dependent bacterial enzymes, *in* Cagniant, D., and Kirsch, G., editors, Proceedings of the Third International Symposium on Organic Selenium and Tellurium Compounds: Universite de Metz, France, p. 117-130.

699. **Stahl, Q.R.,** 1969, Preliminary air pollution survey of selenium and its compounds: a literature review: Litton Systems, Inc., Environmental Systems Division, prepared for the U.S. Public Health Service, Consumer Protection and Environmental Health Service, National Air Pollution Control Administration, Raleigh, North Carolina, HEW Grant Report PH 22-68-25 (unpublished), 48 p.

700. **Stanchev, H.,** 1978, Intestinal absorption of ^{75}Se from sodium selenite and L-selenomethionine in growing poultry, *in* Kirchgessner, M., Trace element metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic of Germany: Institut fur Ernahrungsphysiologie, Technische Universitat Munchen, Freising-Weihenstephan, p. 144.

701. **Stephens, D.W., Waddell, B., and Miller, J.B.,** 1988, Reconnaissance investigation of water quality, bottom sediment, and biota associated with irrigation drainage in the Middle Green River Basin, Utah, 1986-87: U.S. Geological Survey Water Resources Investigations Report 88-4011, 70 p.

702. **Steudel, R., and Laitinen, R.,** 1982, Cyclic selenium sulfides, *in* Boschke, F.L., editor, Topics in current chemistry, v. 102: Inorganic ring systems: Springer-Verlag, Berlin and New York, p. 177-197.

703. **Stopford, W., Donovan, D.H., Abou-Donia, M.B., and Menzel, D.B.,** 1976, Glutathione peroxidase deficiency and mercury allergy: amelioration with selenium supplementation: Proceedings of the Symposium on Selenium-Tellurium in the Environment, University of Notre Dame, Indiana, p. 104 [Industrial Health Foundation, Inc., sponsor].

704. **Subramanian, K.S.,** 1981, Rapid electrothermal atomic absorption method for arsenic and selenium in geological materials via hydride evolution: Fresenius Zeitschrift fur Analytische Chemie, v. 305, p. 382-386.

705. **Sundstrom, H., Yrjanheikki, E., and Kauppila, A.,** 1984, Low serum selenium concentration in patients with cervical or endometrial cancer: International Journal of Gynaecology and Obstetrics, v. 22, p. 35-40.

706. **Tanaka, H., Nakagawa, T., Okabayashi, Y., Aoyama, H., Tanaka, T., Itoh, K., Chikuma, M., Saito, Y., Sakurai, H., Nakayama, M.,** 1987, Development of functional resins by modification of ion-exchange resins and their application to analytical chemistry: Pure and Applied Chemistry, v. 59, no. 4, p. 573-578.

707. **Tanji, K., Lauchli, A., and Meyer, J.,** 1986, Selenium in the San Joaquin Valley: Environment, v. 28, no. 6, p. 6-39.

708. **Tappel, A.L.,** 1974, Selenium-glutathione peroxidase and vitamin E: The American Journal of Clinical Nutrition, v. 27, no. 9, p. 960-965.

709. **Tappel, A.L.,** 1980, Vitamin E and selenium protection from in vivo lipid peroxidation: Annals of the New York Academy of Sciences, v. 355, p. 18-31.

710. **Tardiff, R.G., and Rodricks, J.V.,** 1987, Comprehensive risk assessment, *in* Tardiff, R.G., and Rodricks, J.V., editors, Toxic substances and human risk: principles of data interpretation: Plenum Press, New York, p. 391-430.

711. **Tareque, A.M.M.,** 1975, Effects of selenium on the production of livestocks: Bangladesh Veterinary Journal, v. 9, no. 1-4, p. 43-51.

712. **Thomson, C.D.**, 1977, Selenium in human health and disease: a review, *in* Trace elements in human and animal health in New Zealand: Waikato University Press, Hamilton, New Zealand, p. 72-83.

713. **Thomson, C.D., and Robinson, M.F.**, 1980, Selenium in human health and disease with emphasis on those aspects peculiar to New Zealand: The American Journal of Clinical Nutrition, v. 33, no. 2, p. 303-323.

714. **Thorlacius-Ussing, O., Rungby, J., Moller-Madsen, B., and Danscher, G.**, 1986, Selenium accumulation in the oocyte after exposure to sodium selenite: Acta Pharmacologica et Toxicologica, Supplement 7, v. 59, p. 139-141.

715. **Thorling, E.B., Overvad, K., Heerfordt, A., and Foldspang, A.**, 1985, Serum selenium in Danish blood bank donors: Biological Trace Element Research, v. 8, no. 1, p. 65-73.

716. **Thorn, J., Robertson, J., Buss, D.H., and Bunton, N.G.**, 1978, Trace nutrients. Selenium in British food: British Journal of Nutrition, v. 39, p. 391-396.

717. **Thorne, T.**, 1971, Selenium poisoning: Wyoming Wildlife, v. 35, no.1, p. 32-33.

718. **Thornton, I.**, 1979, Geochemical aspects of trace metal interactions, *in* Di Ferrante, E., editor, Trace metals: exposure and health effects, Proceedings of the Research Seminar, the University of Surrey, Guildford, United Kingdom, July 10-13, 1978: Pergamon Press, Oxford and New York, p. 148-157.

719. **Thornton, I.**, 1983, Geochemistry applied to agriculture, *in* Thornton, I., editor, Applied environmental geochemistry: Academic Press, London, p. 231-266.

720. **Tidball, R.R., Severson, R.C., Gent, C.A., and Riddle, G.O.**, 1986, Element associations in soils of the San Joaquin Valley, California: U.S. Geological Survey Open File Report 86-583, 15 p.

721. **Trelease, S.F., and Beath, O.A.**, 1949, Selenium: its geological occurrence and its biological effects in relation to botany, chemistry, agriculture, nutrition, and medicine: Published by the authors, New York, 292 p.

722. **Trelease, S.F., and Martin, A.L.**, 1936, Plants made poisonous by selenium absorbed from the soil: Botanical Review, 2 p. 373-396.

723. **Trelease, S.F., and Trelease, H.M.**, 1938, Selenium as a stimulating and possibly essential element for indicator plants: American Journal of Botany, v. 25, p. 372-380.

724. **Tsongas, T.A., and Ferguson, S.W.**, 1978, Selenium concentrations in human urine and drinking water, *in* Kirchgessner, M., Trace element metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic of Germany: Institut fur Ernahrungsphysiologie, Technische Universitat Munchen, Freising-Weihenstephan, p. 320-321.

725. **Tucker, J.O.**, 1960, Preliminary report of selenium toxicity in sheep: unpublished paper presented at the annual meeting of the American College of Veterinary Toxicologists, Denver, Colorado, August, 1960, 8 p.

726. **Twomey, T., Crinion, R.A.P., and Glazier, D.B.**, 1977, Selenium toxicity in cattle in County Meath: Irish Veterinary Journal, v. 31, no. 3, p. 41-46.

727. **Twomey, A.C., and Twomey, S.J.,** 1936, Selenium and duck sickness: Science, v. 83, no. 2159, p. 470-471.

728. **Ullrey, D.E.,** 1974, The selenium-deficiency problem in animal agriculture, *in* Hoekstra, W.G., Suttie, J.W., Ganther, H.E., and Mertz, W., editors, Trace element metabolism in animals-2, Proceedings of the Second International Symposium on Trace Element Metabolism in Animals, University of Wisconsin, Madison, Wisconsin: University Park Press, Baltimore, p. 275-293.

729. **Ullrey, D.E.,** 1981, Vitamin E for swine: Journal of Animal Science, v. 53, no. 4, p. 1039-1056.

730. **Ullrey, D.E.,** 1987, Biochemical and physiological indicators of selenium status in animals: Journal of Animal Science, v. 65, no. 6, p. 1712-1726.

731. **Ullrey, D.E., Light, M.R., Brady, P.S., Whetter, P.A., Tilton, J.E., Henneman, H.A., and Magee, W.T.,** 1978, Selenium supplements in salt for sheep, *in* Kirchgessner, M., Trace element metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic of Germany: Institut fur Ernahrungsphysiologie, Technische Universitat Munchen, Freising-Weihenstephan, p. 530-534.

732. **Ullrey, D.E., Schmitt, S.M., Cooley, T.M., Ku, P.K., and Whetter, P. A.,** 1985, Selenium, vitamin E and capture myopathy in white-tailed deer, *in* Mills, C.F., Bremner, I, and Chesters, J.K., editors, Trace elements in man and animals-5, Proceedings of the Fifth International Symposium on Trace Elements in Man and Animals: Commonwealth Agricultural Bureaux, Scotland, p. 113-115.

733. **Underwood, E.J.,** 1978a, Future aspects of trace element research in animal production, *in* Kirchgessner, M., editor, Trace element metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic of Germany: Institut fur Ernahrungsphysiologie, Technishe Universitat Munchen, Freising-Weihenstephan, p. 654-657.

734. **Underwood, E.J.,** 1978b, Interactions of trace elements, *in* Oehme, F.W., editor, Toxicity of heavy metals in the environment: Marcel Dekker, Inc., New York, p. 641-668.

735. **U.S Environmental Protection Agency,** 1987, Ambient water quality criteria for selenium - 1987: Environmental Protection Agency (E.P.A.) Report 440/5-87-006, 121 p.

736. **University of California Committee of Consultants on Drainage Water Reduction,** 1988a, Opportunities for drainage water reduction, No. 1 *of* a series on drainage, salinity, and toxic constituents: University of California Salinity/Drainage Task Force and the Water Resources Center, 28 p.

737. **University of California Committee of Consultants on Drainage Water Reduction,** 1988b, Associated costs of drainage water reduction, No. 2 *of* a series on drainage, salinity, and toxic constituents: University of California Salinity/Drainage Task Force and the Water Resources Center, 29 p.

738. **University of California Committee of Consultants on San Joaquin River Water Quality Objectives,** 1988a, San Joaquin Valley agriculture and river water quality, No. 3 *of* a series on drainage, salinity, and toxic constituents: University of California Salinity/Drainage Task Force and the Water Resources Center, 22 p.

739. **University of California Committee of Consultants on San Joaquin River Water Quality Objectives,** 1988b, The evaluation of water quality criteria for selenium, boron, and

molybdenum in the San Joaquin River Basin, No. 4 *of* a series on drainage, salinity, and toxic constituents: University of California Salinity/Drainage Task Force and the Water Resources Center, 25 p.

740. **University of California, Riverside,** 1987, U.C. Riverside scientists track selenium in food crops: University of California at Riverside News, December 2, 1986 issue, 3. p.

741. **Ursini, F., and Bindoli, A.,** 1987, The role of selenium peroxidases in the protection against oxidative damage of membranes: Chemistry and Physics of Lipids, v. 44, no. 2-4, p. 255-276.

742. **Valentine, J.L., Faraji, B., and Kang, H.K.,** 1988, Human glutathione peroxidase activity in cases of high selenium exposures: Environmental Research, v. 45, p. 16-27.

743. **Valentine, J.L., Kang, H.K., and Spivey, G.H.,** 1978, Selenium levels in human blood, urine, and hair in response to exposure via drinking water: Environmental Research, v. 17, p. 347-355.

744. **Valentine, J.L., Reisbord, L.S., Kang, H.K., and Schluchter, M.D.,** 1987, Effects on human health of exposure to selenium in drinking water, *in* Combs, G.F., Jr., Spallholz, J.E., Levander, O.A., and Oldfield, J.E., editors, Selenium in biology and medicine, part B, Proceedings of the Third International Symposium, Beijing, 1984: AVI Book, Van Nostrand Reinhold Company, New York, p. 675-687.

745. **Van Kampen, K.R., and James L.F.,** 1978, Manifestations of intoxication by selenium-accumulating plants, *in* Keeler, R.F., Van Kampen, K.R., and James, L.F., editors, Effects of poisonous plants on livestock: Academic Press, New York, p. 135-138.

746. **Van Ryswyk, A.L., Broersma, K., and Kalnin, C.M.,** 1976, Selenium content of alfalfa grown on orthic gray luvisolic and carbonated orthic gleysolic soils: Canadian Journal of Plant Science, v. 56, p. 753-756.

747. **Van Vleet, J.F.,** 1980, Current knowledge of selenium-vitamin E deficiency in domestic animals: Journal of the American Veterinary Medical Association, v. 176, no. 4, p. 321-325.

748. **Van Vleet, J.F., and Watson, R.R.,** 1984, Effects of selenium and vitamin E on resistance to infectious disease, *in* Watson, R.R., editor, Nutrition, disease resistance, and immune function: Marcel Dekker, Inc., New York, p. 299-312.

749. **Vernie, L.N.,** 1984, Selenium in carcinogenesis: Biochimica et Biophysica Acta, v. 738, no. 4, p. 203-217.

750. **Veterinary Learning Systems Co., Inc.,** 1985, Selenium responsive diseases in food animals, *in* Proceedings of a symposium held at the Western States Veterinary Conference, February 18, 1985, Las Vegas, Nevada: Veterinary Learning Systems Company, Inc., 32 p.

751. **Vinson, J.A., and Bose, P.,** 1987a, Comparison of the toxicity of inorganic and natural selenium, *in* Combs, G. F., Jr., Spallholz, J. E., Levander O. A., and Oldfield, J. E., editors, Selenium in biology and medicine, part A, Proceedings of the Third International Symposium, Beijing, 1984: AVI Book, Van Nostrand Reinhold Company, New York, p. 513-515.

752. **Vinson, J.A., and Bose, P.,** 1987b, Relative bioavailability of inorganic and natural selenium, *in* Combs, G. F., Jr., Spallholz, J. E., Levander O. A., and Oldfield, J. E., editors, Selenium in biology and medicine, part A, Proceedings of the Third International Symposium, Beijing, 1984: AVI Book, Van Nostrand Reinhold Company, New York, p. 445-449.

753. **Voors, A.W.,** 1979, The association of trace elements and cardiovascular diseases: a selected review of positive findings in the literature, *in* U.S National Committee for Geochemistry, editors, Geochemistry of water in relation to cardiovascular disease: National Academy of Sciences, Washington, D.C., p. 82-90.

754. **Walker, D.R.,** 1971, Selenium in forage species in central Alberta: Canadian Journal of Soil Science, v. 51, p. 506-508.

755. **Walker, W.J., Burau, R.G., Silberman, D., and Jacobson, A.,** 1988, The San Joaquin Valley drainage program; selenium round-robin: final report to the San Joaquin Valley drainage program by Department of Land, Air, and Water Resources, University of California, Davis (unpublished), 39 p.

756. **Waltner-Toews, D., Martin, S.W., and Meek, A.H.,** 1986, Selenium content in the hair of newborn dairy heifer calves and its association with preweaning morbidity and mortality: Canadian Journal of Veterinary Research, v. 50, p. 347-350.

757. **Watenpaugh, D.E., and Beitinger, T.L.,** 1985, Absence of selenate avoidance by fathead minnows (*Pimephales promelas*): Water Research, v. 19, no. 7, p. 923-926.

758. **Watkinson, J.H.,** 1977, Influence of soil Se on the Se level in human blood in New Zealand, *in* Trace Elements in human and animal health in New Zealand: Waikato University Press, Hamilton, New Zealand, p. 89 [abstract].

759. **Watson, C.A.,** 1981, Development and testing of hydride generation methods for antimony and selenium in organic matter-the work of the Metallic Impurities in Organic Matter Sub-Committee of the Analytical Methods Committee: Analytical Proceedings Royal Society of Chemistry, v. 18, no. 11, p. 482-485.

760. **Watson, R.R., and Leonard, T.K.,** 1986, Selenium and vitamins A, E, and C: nutrients with cancer prevention properties: Journal of The American Dietetic Association, v. 86, no. 4, p. 505-510.

761. **Wattenberg, L.W.,** 1981, Inhibitors of gastrointestinal neoplasia, *in* Bruce, W.R., Correa, P., Lipkin, M., Tannenbaum, S.R., and Wilkins, T.D., editors, Banbury report 7: gastrointestinal cancer: endogenous factors: Cold Spring Harbor Laboratory, p. 153-165.

762. **Wells, F.C., Jackson, G.A., and Rogers W.J.,** 1988, Reconnaissance investigation of water-quality, bottom sediment, and biota associated with irrigation drainage in the Lower Rio Grande Valley and Laguna Atascosa National Wildlife Refuge, Texas, 1986-87: U.S. Geological Survey Water-Resources Investigations Report 87-4277, 89 p.

763. **Welz, B., and Melcher, M.,** 1981, Mutual interactions of elements in the hydride technique in atomic absorption spectrometry, part 1. Influence of selenium on arsenic determination: Analytica Chimica Acta, v. 131, p. 17-25.

764. **Welz, B., and Melcher, M.,** 1987, Accuracy of selenium determination in human body fluids using hydride-generation atomic absorption spectrometry, *in* Combs, G. F., Jr., Spallholz, J. E., Levander O. A., and Oldfield, J. E., editors, Selenium in biology and medicine, part B, Proceedings of the Third International Symposium, Beijing, 1984: AVI Book, Van Nostrand Reinhold Company, New York, p. 576-585.

765. **Wendel, A., Fausel, M., Safayhi, H., Tiegs, G., and Otter, R.,** 1985, Studies on the glutathione peroxidase-mimicking seleno-organic compound ebselen (PZ 51), *in* Mills, C.F., Bremner, I, and Chesters, J.K., editors, Trace elements in man and animals-5, Proceedings of the Fifth

International Symposium on Trace Elements in Man and Animals: Commonwealth Agricultural Bureaux, Scotland, p. 104-108.

766. **Whanger, P.D.,** 1970, Sulfur-selenium relationships in animal nutrition: The Sulphur Institute Journal, v. 6, no. 3, p. 6-10.

767. **Whanger, P.D.,** 1976, Selenium versus metal toxicity in animals: Proceedings of the Symposium on Selenium-Tellurium in the Environment, University of Notre Dame, Indiana, p. 234-252 [Industrial Health Foundation, Inc., sponsor].

768. **Whanger, P.D.,** 1985, Metabolic interactions of selenium with cadmium, mercury, and silver, *in* Draper, H.H., editor, Advances in nutritional research, v. 7: Plenum Press, New York, p. 221-250.

769. **Whanger, P.D., Pedersen, N.D., and Weswig, P.H.,** 1974, Selenium-binding proteins of ovine tissues, *in* Hoekstra, W.G., Suttie, J.W., Ganther, H.E., and Mertz, W., editors, Trace element metabolism in animals-2, Proceedings of the Second International Symposium on Trace Element Metabolism in Animals, University of Wisconsin, Madison, Wisconsin: University Park Press, Baltimore, p. 571-573.

770. **Whanger, P.D., Ridlington, J. W., and Holcomb, C.L.,** 1980, Interactions of zinc and selenium on the binding of cadmium to rat tissue proteins: Annals of the New York Academy of Sciences, v. 355, p. 333-346.

771. **Whanger, P.D., Tripp, M.J., Black, R.S., and Weswig, P.H.,** 1978, Distribution of selenium and glutathione peroxidases in ovine tissue cytosols, *in* Kirchgessner, M., editor, Trace element metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic of Germany: Institut fur Ernahrungsphysiologie Technische Universitat Munchen, Freising-Weihenstephan, p. 85-88.

772. **Whanger, P.D., and Weswig, P.H.,** 1969, Selenium responses in the rat independent of vitamin E: Federation Proceedings, v. 28, p. 809 [abstract].

773. **White, C.L., and Somers, M.,** 1978, The effects of varying dietary sulphate and selenomethionine on sulphur, nitrogen and selenium metabolism in sheep, in Kirchgessnser, M., editor, Trace element metabolism in man and animals-3, Proceedings of the 3rd International Symposium, Freising, Federal Republic Germany, Institut fur Ernahrungsphysiologie Technische Universitat Munchen, Freising Weihenstephan, p. 526-529.

774. **White, J.R., Hofmann, P.S., Hammond, D., and Baumgartner, S.,** 1987, Selenium verification study 1986: Report to the California State Water Resources Control Board from the California Department of Fish and Game (unpublished), 161 p.

775. **White, J.R., Hofmann, P.S., Hammond, D., and Baumgartner, S.,** 1988, Selenium Verification Study 1986-1987: Report to the California State Water Resources Control Board from the California Department of Fish and Game (unpublished), 111 p.

776. **Wiewiorowski, T.K.,** 1972, Binary and ternary systems involving sulphur, *in* Addison, C.C., and Sowerby, D.B., editors, MTP international review of science, main group elements groups V and VI, Inorganic chemistry series one, v. 2: University Park Press, Baltimore, p. 171-186.

777. **Wiggett, G., and Alfors, J.,** 1986, Selenium: California Geology, May 1986, p. 99-107.

778. **Wilber, C.G.,** 1980, Toxicology of selenium: a review: Clinical Toxicology, v. 17, no. 2, p. 171-230.

779. **Willett, W.C.,** 1986, Selenium, vitamin E, fiber, and the incidence of human cancer: an epidemiologic perspective, *in* Poirier, L.A., Newberne, P.M., and Pariza, W., editors, Essential nutrients in carcinogenesis, advances in experimental medicine and biology, v. 206: Plenum Press, New York, p. 27-34.

780. **Willett, W.C., and Stampfer, M.J.,** 1986, Selenium and human cancer: Acta Pharmacologica et Toxicologica, Supplement 7, v. 59, p. 240-247.

781. **Williams, C., and Thornton, I.,** 1972, The effect of soil additives on the uptake of molybdenum and selenium from soils from different environments: Plant and Soil, v. 36, p. 395-406.

782. **Williams, M.C.,** 1985, Chemotaxonomic methods of identifying poisonous compounds in plants, *in* Seawright, A.A., Hegarty, M.P., James, L.F., and Keeler, R.F., editors, Plant toxicology, Proceedings of the Australia-USA Poisonous Plants Symposium, Brisbane, Australia, May 14-18, 1984: Queensland Poisonous Plants Committee, Queensland Department of Primary Industries, Animal Research Institute, Yeerongpilly, p. 42-49.

783. **Williams, R.J.P.,** 1978, A short note on selenium biochemistry, *in* Williams, R.J.P., and Da Silva, J.R.R.F., editors, New trends in bio-inorganic chemistry: Academic Press, New York, p. 253-260.

784. **Willson, R.L.,** 1987, Vitamin, selenium, zinc, and copper interactions in free radical protection against ill-placed iron: Proceedings of the Nutrition Society, v. 46, no. 1, p. 27-34.

785. **Wilson, L.,** 1985, Possible effects of selenium on Wyoming residents from 1979-1983: Geological Survey of Wyoming files (unpublished), 17 p.

786. **Wilson, R.W.,** 1951, Ground water investigations of a portion of the Kendrick Project, Natrona County, Wyoming: M.A. thesis, University of Wyoming, Laramie, 94 p., scale 1:24,000.

787. **Wilson, T.M., Scholz, R.W., and Drake, T.R.,** 1983, Selenium toxicity and porcine focal symmetrical poliomyelomalacia: description of a field outbreak and experimental reproduction: Canadian Journal of Comparative Medicine, v. 47, p. 412-421.

788. **Winner, R.W.,** 1984, Selenium effects on antennal integrity and chronic copper toxicity in *Daphnia pulex* (deGeer): Bulletin of Environmental Contamination and Toxicology, v. 33, p. 605-611.

789. **Workman, S.M., and Soltanpour, P.N.,** 1980, Importance of prereducing selenium(VI) to selenium(IV) and decomposing organic matter in soil extracts prior to determination of selenium using hydride generation: Soil Science Society of America Journal, v. 44, no. 6, p. 1331-1333.

790. **Wren, C.D.,** 1984, Distribution of metals in tissues of beaver, raccoon and otter from Ontario, Canada: The Science of the Total Environment, v. 34, p. 177-184.

791. **Wu, L., Huang, Z., and Burau, R.G.,** 1988, Selenium accumulation and selenium-salt cotolerance in five grass species: Crop Science, v. 28, p. 517-522.

792. **[Wyoming] Governor's Task Force on Selenium,** 1989, Report to the Governor: selenium in Wyoming, issues and recommendations: (unpublished report) 22 p., scale 1:1,000,000.

793. **[Wyoming] State Selenium Work Group,** 1988, Selenium information tour: Kendrick/Casper-Alcova Irrigation District: University of Wyoming Cooperative Extension Service, Laramie, 11 p., scale 1:1,000,000.

794. **Yan, J.**, 1987, Influence of barium and selenium on explanted heart cells, *in* Combs, G. F., Jr., Spallholz, J. E., Levander O. A., and Oldfield, J. E., editors, Selenium in biology and medicine, part A, Proceedings of the Third International Symposium, Beijing, 1984: AVI Book, Van Nostrand Reinhold Company, New York, p. 324-337.

795. **Yang, G., Chen, J., Wen, Z., Ge, K., Zhu, L., Chen, X., and Chen, X.**, 1984, The role of selenium in Keshan disease, *in* Draper, H.H., editor, Advances in nutritional research, v. 6: Plenum Press, New York, p. 203-231.

796. **Yang, G., Wang, S., Zhou, R., and Sun, S.**, 1983, Endemic selenium intoxication of humans in China: American Journal of Clinical Nutrition, v. 37, p. 872-881.

797. **Yang, G.Q.**, 1985, Keshan disease: an endemic selenium-related deficiency disease, *in* Chandra, R.K., editor, Trace elements in nutrition of children: Verey/Raven Press, New York, p. 273-290.

798. **Ylaranta, T.**, 1989, Selenium fertilization in practice in Finland, *in* Neve, J., and Favier, A., editors, Selenium in medicine and biology, Proceedings of the Second International Congress on Trace Elements in Medicine and Biology, March, 1988, Avoriaz, France: Walter de Gruyter, Berlin and New York, p. 341-344.

799. **Yonemoto, J., Satoh, H., Himeno, S., and Suzuki, T.**, 1983, Toxic effects of sodium selenite on pregnant mice and modification of the effects by vitamin E or reduced glutathione: Teratology, v. 28, p. 333-340.

800. **Young, J.A., and James, L.F.**, 1988, Oxalate poisoning, *in* James, L.F., Ralphs, M.H., and Nielsen, D.B., editors, The ecology and economic impact of poisonous plants on livestock production: Westview Press, Boulder, p. 261-273.

801. **Young, V.R., Nahapetian, A., and Janghorbani, M.**, 1982, Selenium bioavailability with reference to human nutrition: The American Journal of Clinical Nutrition, v. 35, no. 5, p. 1076-1088.

802. **Yudovich, Y.E., and Ketris, M.P.**, 1984, Selenium in Pay Khoy black shales: Geokhimiya, v. 11, p. 1767-1774 [translation].

803. **Yung, C.Y.**, 1984, A synopsis on metals in medicine and psychiatry: Pharmacology, Biochemistry, and Behavior, v. 21, supplement 1, p. 41-47.

804. **Yunice, A.A., and Hsu, J.M.**, 1987, Role of selenium in aging: an overview, *in* Combs, G. F., Jr., Spallholz, J. E., Levander O. A., and Oldfield, J. E., editors, Selenium in biology and medicine, part B, Proceedings of the Third International Symposium, Beijing, 1984: AVI Book, Van Nostrand Reinhold Company, New York, p. 657-674.

805. **Zachara, B.A., Zamorski, R., Borowska, K., and Kanarkowski, R.**, 1989, Whole blood and plasma selenium concentrations, erythrocyte and plasma glutathione peroxidase activities in dams and lambs, *in* Neve, J., and Favier, A., editors, Selenium in medicine and biology, Proceedings of the Second International Congress on Trace Elements in Medicine and Biology, March, 1988, Avoriaz, France: Walter de Gruyter, Berlin and New York, p. 369-372.

806. **Zehr, J.P., and Oremland, R.S.**, 1987, Reduction of selenate to selenide by sulfate-respiring bacteria: experiments with cell suspensions and estuarine sediments: Applied and Environmental Microbiology, v. 53, no. 6, p. 1365-1369.

807. **Zervas, G.**, 1988, Treatment of dairy sheep with soluble glass boluses containing copper, cobalt and selenium: Animal Feed Science and Technology, v. 19, p. 79-83.

808. **Zervas, G., Telfer, S.B., Carlos, G., and Anderson, P.,** 1988, The effect of soluble-glass boluses containing copper, cobalt, and selenium on the blood composition of ewes: Animal Feed Science and Technology, v. 21, p. 23-29.

809. **Zieve, R., and Peterson, P.J.,** 1987, Selenium in plants: soil versus atmospheric origin, *in* Combs, G. F., Jr., Spallholz, J. E., Levander O. A., and Oldfield, J. E., editors, Selenium in biology and medicine, part A, Proceedings of the Third International Symposium, Beijing, 1984: AVI Book, Van Nostrand Reinhold Company, New York, p. 548-555.

810. **Zingaro, R.A.,** 1972, The chemistry of selenium-bearing organometallic derivatives of Group VA elements: Annals of the New York Academy of Sciences, v. 192, p. 72-89.

811. **Zingaro, R.A., and Meyers, E.A.,** 1980, Physical, chemical and toxicological properties of selenium and tellurium: recent developments: Proceedings of the International Symposium on Industrial Uses of Selenium and Tellurium, Toronto, Canada, p. 25-30 [Selenium-Tellurium Development Association, Inc., sponsor].

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