

# References

## Section 9.1 Introduction

- ABS 1999. *Year book Australia*, Number 81. Australian Bureau of Statistics, Canberra.
- O'Sullivan DB & Kiley TL 1996. Status of Australian aquaculture. *Austasia Aquaculture Magazine*, Trade Directory 1996.
- Wilson L & Johnson A 1997. Agriculture in the Australian economy. In *Australian agriculture*, Morescope Publishing Pty Ltd, Hawthorn East, Victoria, 7–18.

## Section 9.2 & 9.3 Agricultural water uses (water quality for irrigation and general use; livestock drinking water guidelines)

- ABS 1999. *Year book Australia*, Number 81. Australian Bureau of Statistics, Canberra.
- Adriano DC 1986. *Trace elements in the terrestrial environment*. Springer-Verlag, Berlin.
- Albanus L, Alexander J, Cotruvo JA, de Kruijf H, Dieter HH & Fawell J 1989. *Revision of the WHO Guidelines for Drinking-Water Quality*. Report of a consultation in Rome, Italy, 17–19 October 1988. Document WHO/PEP/89.4, World Health Organization, Geneva.
- Anderson DM & Stothers SC 1978. Effects of saline water high in sulfates, chlorides and nitrates on the performance of young weanling pigs. *Journal of Animal Science* 47, 900–907.
- Anderson RA 1987. Chromium. In *Trace elements in human nutrition*, ed W Mertz, Academic Press, New York, 225–244.
- Anderson TM & van Haaren P 1989. Rainproofing glyphosate with 'Bondcrete' cement additive for improved bitou bush control. Technical note, *Plant Protection Quarterly* 4 (1), 45–46.
- Anke M, Grun M, Dittrich G, Groppel B & Henning A 1974. Low nickel rations for growth and reproduction in pigs. In *Trace element metabolism in animals 2*, eds WG Hoekstra, JW Suttie, HE Ganther & W Mertz, University Park Press, Baltimore, Maryland.
- ANZECC 1992. *Australian water quality guidelines for fresh and marine waters*. National Water Quality Management Strategy Paper No 4, Australian and New Zealand Environment and Conservation Council, Canberra.
- APHA, AWWA & WEF 1998. *Standard methods for the examination of water and wastewater*, 20th edition, eds LS Clesceri, AE Greenberg & AD Eaton, American Public Health Association, American Water Works Association, Water Environment Federation, Washington DC.
- ARMCANZ, ANZECC & NHMRC 2000. *Guidelines for sewerage systems — use of reclaimed water*. National Water Quality Management Strategy Paper No 14, Agriculture and Resource Management Council of Australia and New Zealand, Australian and New Zealand Environment and Conservation Council, National Health and Medical Research Council, Canberra.
- Arundel JH 1972. Cysticercosis of sheep and cattle. *Australian Meat Research Commission Review* 4, 1–21.
- Atwill ER, Sweitzer RA, Pereira MDGC, Gardner IA, Van Vuren D & Boyce WM 1997. Prevalence of and associated risk factors for shedding *Cryptosporidium parvum* oocysts and *Giardia* cysts within feral pig populations in California. *Applied and Environmental Microbiology* 63, 3946–3949.
- Avery AA 1999. Infantile methemoglobinemia: Reexamining the role of drinking water nitrates. *Environmental Health Perspect* 107, 583–586.
- Awad AS 1989. *Farm water quality and treatment*. NSW Agriculture & Fisheries Agfact AC.2, 5th edn.
- Ayers RS 1977. Quality of water for irrigation. *Journal of the Irrigation and Drainage Division* 103 (IR2), 135–154.
- Ayers RS & Westcot DW 1976. *Water quality for agriculture*. Irrigation and Drainage Paper 29, Food and Agriculture Organisation of the United Nations, Rome.
- Ayers RS & Westcot DW 1985. *Water quality for agriculture*. Irrigation and Drainage Paper 29, 1st revision, Food and Agriculture Organisation of the United Nations, Rome.
- Bagdasaryan GA 1964. Survival of viruses of the enteroviruses group in soils and vegetables. *Journal of Hygiene Entomology, Microbiology and Immunology* 8, 497–505.

- Bailey CB 1977. Influence of aluminium hydroxide on the solubility of silicic acid in rumen fluid and the absorption of silicic acid from the digestive tract of ruminants. *Canadian Journal of Animal Science* 57, 239–244.
- Baker DE 1974. Copper: Soil, water, plant relationship. *FASEB Journal* 33, 1188–1193.
- Balnave D & Scott T 1986. The influence of minerals in drinking water on egg shell quality. *Nutrition Reports International* 34, 29–34.
- Balnave D & Yoselwitz I 1987. The relation between sodium chloride concentration in drinking water and egg-shell damage. *British Journal of Nutrition* 58, 507–509.
- Balnave D & Zhang D 1998. Adverse responses in egg shell quality in late-lay resulting from short-term use of saline drinking water in early or mid lay. *Australian Journal of Agricultural Research* 49(7), 1161–1165.
- Banks A, Broadley R, Collinge M & Middleton K 1989. *Pesticide application manual*. 2nd edn, Queensland Department of Primary Industries Information Series Q189003. Brisbane.
- Barrow J 1989. Surface reactions of phosphate in soil. *Agricultural Science* September, 33–37.
- Barrow NJ 1974. The slow reactions between soil and anions. 1. Effects of time, temperature, and water content of a soil on the decrease in effectiveness of phosphate for plant growth. *Soil Science* 118, 380–386.
- Barry GA 1997. *Total heavy metal status of horticultural soils in Queensland*. Final report to Horticultural Research and Development Corporation on Project VG 404. Queensland Department of Natural Resources, Brisbane.
- Bell RG & Bole JB 1976. Elimination of faecal coliform bacteria from reed canarygrass irrigated with municipal sewage lagoon effluent. *Journal of Environmental Quality* 5(4), 417–418.
- Belluck DA & Anderson HA 1988. Wisconsin's risk assessment based numerical groundwater standards program. In *Agrichemicals and groundwater protection: Resources and strategies for state and local management*. Conference Proceedings, St Paul, Minnesota, 24–25 October, Freshwater Foundation, Navarre, Minnesota, 239–253.
- Bernstein L 1967. *Quantitative assessment of irrigation water quality in water quality criteria*. Special Technical Publication 416, American Society for Testing and Materials, Philadelphia.
- Bernstein L & Francois LE 1973. Leaching requirement studies; sensitivity of alfalfa to salinity of irrigation and drainage waters. *Soil Science Society of America Proceedings* 37, 931–943.
- Bjorneberg DL, Karlen DL, Kanwar RS & Cambardella CA 1998. Alternative N fertilizer management strategies effects on subsurface drain effluent and N uptake. *Applied Engineering in Agriculture* 14, 469–473.
- Blewett DA, Wright SE, Casemore DP, Booth NE & Jones CE 1993. Infective dose size studies on *Cryptosporidium parvum* using gnotobiotic lambs. *Water Science and Technology* 27, 61–64.
- Blumenthal UJ, Mara DD, Ayres RM, Cifuentes E, Peasey A, Stott R, Lee DL & Ruiz-Palacios G 1996. Evaluation of the WHO nematode egg guideline for restricted and unrestricted irrigation. *Water Science Technology* 33, 277–283.
- Bouwer H 1990. Agricultural chemicals and groundwater quality. *Journal of Soil and Water Conservation* 45, 234–244.
- Bovey RW 1985. Efficacy of glyphosate in non-crop situations. In *The herbicide glyphosate*, 442–443, Butterworths, London.
- Bower CA, Ogata G & Tucker JM 1968. Sodium hazard of irrigation waters as influenced by leaching fraction and precipitation and solution of calcium carbonate. *Soil Science* 106, 29–34.
- Bower CA, Wilcox LV, Akin GW & Keys MG 1965. An index of the tendency of  $\text{CaCO}_3$  to precipitate from irrigation waters. *Soil Science Society of America Proceedings* 44, 91–92.
- Brackpool CE, Roberts JR and Balnave D 1996. Blood electrolyte status over the daily laying cycle and the effect of saline drinking water on the availability of calcium in the blood for egg-shell formation in the laying hen. *Journal of Animal Physiology and Animal Nutrition*. 75, 214–225.
- Bradford GR 1963. Lithium survey of California's water resources. *Soil Science* 96, 77–81.
- Breeze VG 1973. Land reclamation and river pollution problem in the Croal Valley caused by waste from chromate manufacture. *Journal of Applied Ecology* 10, 513–525.
- Bresler E, McNeal BL & Carter DL 1982. *Saline and sodic soils: Principles, dynamics, modelling*. Advanced Series in Agricultural Sciences No 10, Springer Verlag, Berlin.
- Brookes PC 1995. The use of microbial parameters in monitoring soil pollution by heavy metals. *Biology and Fertility of Soils* 19, 269–279.
- Brown J & Simmonds JR 1995. *FARMLAND — A dynamic model for the transfer of radionuclides through terrestrial food chains*. National Radiological Protection Board, Report NRPB-R273, Chilton, UK.
- Bruce RC & Rayment GE 1982. Analytical methods and interpretations used by the Agricultural Chemistry Branch for soil and land use surveys. Queensland Department of Primary Industries Bulletin QB82004, Brisbane.

- Brümmer G & Herms U 1983. Influence of soil reaction and organic matter on the solubility of heavy metals in soils. In *Effects of accumulation of air pollutants in forest ecosystems*, eds B Ulrich & J Pankrath, D Reidel, Dordrecht, 233–243.
- Bruning-Fann CS, Kaneene JB, Lloyd JW, Stein AD, Thacker B and Hurd HS 1996. Associations between drinking-water nitrate and the productivity and health of farrowing swine. *Preventive-Veterinary-Medicine* 26, 33–46.
- Brunnich JC 1927. Water for irrigation and stock. *Queensland Agricultural Journal* 11, 406–410.
- Burton J 1965. *Water storage on the farm*. Bulletin No 9, vol 1, Water Research Foundation of Australia.
- Cahill D 1993. *Review of Phytophthora diseases in Australia*. Project ANU16A. A report for the RIRDC June 1993, Canberra.
- Cakir A, Sullivan TW & Mather FB 1978. Alleviation of fluorine toxicity in starting turkeys and chicks with aluminum. *Poultry Science* 57, 498.
- Cannon HL 1963. The biogeochemistry of vanadium. *Soil Science* 96, 196–204.
- Carmichael WW 1994. The toxins of Cyanobacteria. *Scientific American* January, 64–72.
- Carmichael WW & Falconer IR 1993. Diseases related to freshwater blue-green algal toxins, and control measures. In *Algal toxins in seafood and drinking water*, ed IR Falconer, Academic Press, London, 187–209.
- Case AA 1963. The nitrate problem. Bulletin D18:1, National Hog Farmer Series, Swine Information Service.
- Cass A 1980. Use of environmental data in assessing the quality of irrigation water. *Soil Science* 129, 45–53.
- Cass A & Sumner ME 1982a. Soil pore structural stability and irrigation water quality: I. Empirical sodium stability model. *Soil Science Society of America Journal* 46, 503–506.
- Cass A & Sumner ME 1982b. Soil pore structural stability and irrigation water quality: II. Sodium stability data. *Soil Science Society of America Journal* 46, 507–512.
- Cass A & Sumner ME 1982c. Soil pore structural stability and irrigation water quality: III. Evaluation of soil stability and crop yield in relation to salinity and sodicity. *Soil Science Society of America Journal* 46, 513–517.
- Cataldo DA, Garland TR & Wildung RE 1983. Cadmium uptake kinetics in intact soybean plants. *Plant Physiology* 73, 844–848.
- CCME 1996. Canadian water quality guidelines: updates (May 1996). Appendix XXI to Canadian water quality guidelines. Canadian Council of Ministries of the Environment, Ottawa.
- CCME 1993. Protocols for deriving water quality guidelines for the protection of agricultural water uses (October 1993). Appendix XV to Canadian water quality guidelines. Canadian Council of Ministries of the Environment, Ottawa.
- CCREM 1987. *Canadian water quality guidelines*. Canadian Council of Resource and Environment Ministers, Inland Water Directorate, Environment Canada, Ottawa.
- Challis DJ, Zeinstra JS & Anderson MJ 1987. Some effects of water quality on the performance of high yielding cows in an arid climate. *Veterinary Record* 120, 12–15.
- Chapman HD (ed) 1966. *Diagnostic criteria for plant and soils*. University of California, Berkeley.
- Chaudri AM, McGrath SP, Giller KE, Reitz E & Sauerbeck DR 1993. Enumeration of indigenous *Rhizobium leguminosarum* biovar trifolii in soils previously treated with metal contaminated sewage sludge. *Soil Biology and Biochemistry* 25, 301–309.
- Christiansen JE, Olsen EC & Willardson LS 1977. Irrigation water quality evaluation. *Proceedings of the American Society of Civil Engineers: Journal of the Irrigation and Drainage Division* 103 (IR2), 155–169.
- Church DC 1979. *Digestive physiology and nutrition of ruminants*. vol. 2: Nutrition, O & B Book Inc, Corvallis, Oregon.
- Coetzee CB, Casey NH & Meyer JA. 1997. Fluoride tolerance of laying hens. *British Poultry Science* 38, 597–602.
- Cooper B, Jones G, Burch M & Davis R 1996. Agricultural chemicals and algal toxins: emerging water quality issues. In *Managing Australia's inland waters*. Department of Industry, Science and Tourism, Canberra.
- Correll DL 1998. The role of phosphorus in the eutrophication of receiving waters — a review. *Journal of Environmental Quality*. 27, 261–266.
- Cotton FA & Wilkinson G 1972. *Advanced inorganic chemistry: A comprehensive text*, 3rd edn, Interscience Publishers, New York.
- Coup MR & Campbell HG 1964. The effect of excessive iron uptake upon the health and production of dairy cows. *New Zealand Journal of Agricultural Research* 7, 624–638.
- CPHA 1979. *Criteria document in support of a drinking water standard for fluoride: Final report*. Canadian Public Health Association, Ottawa.

- Crane SR & Moore JA 1986. Modelling enteric bacterial die-off: A review. *Water, Air and Soil Pollution* 27, 411–439.
- Craun GF, Berger PS & Calderon RL 1997. Coliform bacteria and waterborne disease outbreaks. *Journal of American Water Works Association* 89, 96–104.
- CRC Press 1982. *Handbook of chemistry and physics*. CRC Press, Boca Raton, Florida.
- Crolet JL 1983. Acid corrosion in wells (CO<sub>2</sub>, H<sub>2</sub>S): Metallurgical aspects, *Journal of Petroleum Technology* 35 (9), 1553–1558.
- Crowley JW 1985. Effects of nitrate on stock. In *Proceedings of the American Society of Agricultural Engineers*. Michigan State University, East Lansing, June 23–26 1985, ASAE, St Joseph, Michigan, paper no 80–2026.
- Cullimore DR 1992. *Practical manual of groundwater microbiology*. Lewis Publishers, London.
- Daniel TC, Sharpley AN & Lemunyon JL 1998. Agricultural phosphorus and eutrophication: a symposium overview. *Journal of Environmental Quality* 27, 251–257.
- Delas J 1963. La toxicite du cuivre accumule dans les sols. *Agrochimica* 7, 258–288.
- Demayo A & Taylor MC 1981. *Guidelines for surface water quality*. Vol 1: Inorganic chemical substances: Copper. Inland Waters Directorate, Environment Canada, Ottawa.
- Denaro G 1991. *An investigation into aggressive CO<sub>2</sub> corrosion in the Flinders sub-basin*. GCL Report series 8, Queensland Government Chemical Laboratory, Brisbane.
- DEST (Department of Environment, Sport and Territories) State of the Environment Advisory Council 1996. *Australia: State of the Environment*. CSIRO Publishing, Collingwood, Victoria.
- Devitt D, Jarrell WM, Jury WA, Lunt OR & Stolzy LH 1984. Wheat response to sodium uptake under zonal saline-sodic conditions. *Soil Science Society of America Journal* 48, 86–92.
- Dils RM, Heathwaite AL, Novotny V & D'Arcy B 1999. The controversial role of tile drainage in phosphorus export from agricultural land. *Water Science and Technology* 39 (12), 55–61.
- DNR 1997. *Salinity Management Handbook*. Department of Natural Resources, Brisbane.
- Doneen LD 1954. Salination of soil by salts in the irrigation water. *Transactions of the American Geophysical Union* 35, 943–950.
- Doneen LD 1966. *Water quality requirements for agriculture*. Proceedings of the National Symposium on Quality Standards for Natural Waters. University of Michigan, Ann Arbor, 213–218.
- Doyle JJ, Plander WH, Grebing SE & Pierce JO 1974. Effect of dietary cadmium on growth, cadmium absorption and cadmium tissue levels in growing lambs. *Journal of Nutrition* 104, 160–166.
- Dutky E 1995. Disease spread in recirculating solutions in recirculating solutions. *Greenhouse Management and Production* July 1995, 88–90.
- DWAF (Department of Water Affairs and Forestry) 1996a. *South African water quality guidelines*, 2nd edn, vol 4: Agricultural use: Irrigation. CSIR Environmental Services, Pretoria.
- DWAF 1996b. *South African water quality guidelines*, 2nd edn, vol 5: Agricultural use: Livestock watering. CSIR Environmental Services, Pretoria.
- Dye WB 1962. A micronutrient survey of Nevada forage. Technical Bulletin 227, Nevada Agricultural Experiment Station, Nevada State University, Reno.
- Edwards AC & Withers PJA 1998. Soil phosphorus management and water quality: A UK perspective. *Soil Use and Management*, 14, 124–130.
- Edwards R, Lepp NW & Jones KC 1995. Other less abundant elements of potential environment significance. In *Heavy metals in soils*, ed BJ Alloway, Blackie Academic, London, 306–352.
- EEC (European Economic Community) 1997. Impact of directive 76/46/EEC and its daughter directives on the most important surface waters in the community. Office of the official publications of the European Community, Luxembourg.
- Ehrlich HL 1990. *Geomicrobiology*. 2nd edn, Marcel Dekker Inc, New York.
- Elliott HA, Liberali MR & Huang CP 1986. Competitive adsorption of heavy metals by soils. *Journal of Environmental Quality* 15, 214–219.
- El-Sheikh AM, Ulrich A & Broyer TC. 1971. Effect of lithium on growth, salt absorption and chemical composition of sugar beet plants. *Agronomy Journal* 63, 755–758.
- Falconer I, Bartram J, Chorus I, Kuiper-Goodman T, Utkilen H, Burch M & Codd GA 1999. Safe levels and safe practices. Chapter 5 in *Cyanobacteria in water: A guide to their public health consequences, monitoring and management*, eds I Chorus & J Bartram, 155–178, E&FN Spon, London.
- Falconer IR, Burch MD, Steffenson DA, Choice M & Coverdale OR 1994. Toxicity of the blue-green alga (Cyanobacterium) *Microcystis aeruginosa* in drinking water to growing pigs, as an animal model for human injury and risk assessment. *Environmental Toxicology and Water Quality: An International Journal* 9, 131–139.

- Farnsworth M & Kline CH 1973. *Zinc chemical*. Zinc Development Association, London.
- Fergusson JE 1990. *The heavy elements: Chemistry, environmental impact and health effects*. Pergamon Press, Sydney.
- Fink M, Feller C, Scharpf HC, Weier U, Maync A, Ziegler J, Paschold PJ, Strohmeyer K 1999. Nitrogen, phosphorous, potassium and magnesium contents of field vegetables — Recent data for fertiliser recommendations and nutrient balances. *Journal of Plant Nutrition and Soil Science* 162, 71–73.
- Flinn PC 1980. *Tolerance of livestock to saline drinking water in western Victoria*. Research Project Series 86, Victorian Department of Agriculture, Melbourne.
- Flinn PC 1984. New look at livestock drinking water curbs. *Farm January*, 23–24.
- Follett RF 1989. *Development in agricultural and managed-forest ecology: Nitrogen management and ground water protection*. Elsevier, Amsterdam.
- Fontana MG 1986. *Corrosion engineering*, 3rd edn, McGraw Hill, New York.
- Foy RH & Withers PJA 1995. The contribution of agricultural phosphorus to eutrophication. *Proceedings of the Fertilisers Society* 365, 1–32.
- Francis G 1878. Poisonous Australian lake. *Nature* 18, 11–12.
- Freney JR, Simpson JR & Denmead OT 1983 Volatilization of ammonia. In *Gaseous loss of nitrogen from plant-soil systems*, eds JR Freney & JR Simpson, pp 1–32. Kluwer Academic Publishers Group, The Hague.
- Frese FG 1938. Effect of oxygen on the corrosion of steel. *Industrial and Engineering Chemistry* 30, 88.
- Froese KL & Kindzierski WB 1998. Health effects associated with wastewater treatment, disposal and reuse. *Water Environmental Research* 70, 962–968.
- Galvin RM 1996. Occurrence of metals in waters: An overview. *Water SA* 22, 7–18.
- Gardner W & Broersma K 1999. Health and performance of beef cattle ingesting Mo-rich forage and water high in Mo and SO<sub>4</sub>. In *People and Rangelands: Building the Future*, Proceedings of the VI International Rangeland Congress, eds D Eldridge & D Freudenberger, vol 2, 978–979.
- Gardner EA & Coughlan KJ 1982. *Physical factors determining soil suitability for irrigated crop production in the Burdekin–Elliot River Area*. Technical Report No 20, Queensland Department of Primary Industries, Agricultural Chemistry Branch, Brisbane.
- Garner RJ 1963. Environmental contamination and grazing animals. *Health Physics* 9, 597–605.
- Gerba CP, Farrah SR, Goyal AM, Wallis C & Melnick JL 1978. Virus survival in wastewater treatment. *Applied Environmental Microbiology* 35, 540–548.
- Gill JY 1984. *Determining the quality of water for irrigation in Queensland*. Queensland Department of Primary Industries Refnote R14/Jul 84, Brisbane.
- Gill JY 1986. *Water quality for agriculture in Queensland*. Queensland Department of Primary Industries, Publication QB86004, Brisbane.
- Gough LP, Shacklette HT & Case AA 1979. *Element concentrations toxic to plants, animals and man*. US Geological Survey Bulletin 1466, Washington DC.
- Green GH & Weeth HJ 1977. Response of heifers ingesting boron in water. *Journal of Animal Science* 45, 812–818.
- Hagan RM, Haise HR & Edminster TW (eds) 1967. Irrigation of agricultural lands. *American Society of Agronomy*, Madison, Wisconsin.
- Hahne HCH & Kroontje W 1973. Significance of pH and chloride concentration on behaviour of heavy metal pollutants: Mercury (II), cadmium (II), zinc (II), and lead (II). *Journal of Environmental Quality* 2, 444–450.
- Hamilton EI 1974. The chemical elements and human morbidity — Water, air and places: A study of natural variability. *Science of the Total Environment* 3, 3–85.
- Hamilton D & Haydon G 1996. *Pesticides and fertilisers in the Queensland sugar industry: Estimates of usage and likely environmental fate*. vol 1: Pesticides. Queensland Department of Primary Industries, Brisbane.
- Hamlen H, Clark E & Janzen E 1993. Polioencephalomalacia in cattle consuming water with elevated sodium sulphate levels: A herd investigation. *Canadian Veterinary Journal* 34, 153–158.
- Hammond PB & Aronson AL 1964. Lead poisoning in cattle and horses in the vicinity of a smelter. *Annals of the New York Academy of Sciences* 111, 595–611.
- Harmsen K & de Haan FAM 1980. Occurrence and behaviour of uranium and thorium in soil water. *Netherlands Journal of Agricultural Science* 28, 40–62.
- Harper GS, King TJ, Hill BD, Harper CML & Hunter RA 2000. Effect of coal mine pit water on the productivity of cattle: II. Effect of increasing concentrations of pit water on feed intake and health. *Australian Journal of Agricultural Research* in press.

- Harper GS, McCrabb GJ, King TJ & Hunter RA 1997. The effect of coal mine pit water on the productivity of cattle: III. Late pregnancy and calf growth. *Australian Journal of Agricultural Research* 48, 155–164.
- Hart BT 1974. *A compilation of Australian water quality criteria*. Australian Water Resources Technical Paper 7, Australian Government Publishing Service, Canberra.
- Hart BT 1982. *Australian water criteria for heavy metals*. Australian Water Resources Technical Paper 77, Australian Government Publishing Service, Canberra.
- Hatch RC 1977. Poisons causing nervous stimulation or depression. In *Veterinary pharmacology and therapeutics*, 4th edn, eds LM Jones, NH Booth & LE McDonalds, Iowa State University, Ames, 1185–1242.
- Hawkins PR, Chandrasena NR, Jones GJ, Humpage AR & Falconer IR 1996. Isolation and toxicity of *Cylindrospermopsis raciborskii* from an ornamental lake. *Toxicon* 35, 341–346.
- Haygarth PM & Jarvis SC 1999. Transfer of phosphorus from agricultural soils. *Advances in Agronomy* 66, 195–249.
- Hem JD 1970. *Study and interpretation of the chemical characteristics of natural water*. Geological Survey Water Supply Paper 1473, 2nd edn, United States Geological Survey, Washington.
- Hemphill FE, Kaeberle ML & Buck WB 1971. Lead suppression of mouse resistance to *Salmonella typhimurium*. *Science* 172 (3987), 1031–1032.
- Herms U & Brümmer G 1984. Einflussgrößen der schwer-metallöslichkeit und bindung in boden. *Zeitschrift fuer Pflanzenernaehrung und Bodenkunde* 147, 400–424.
- Hespanhol I & Prost AME 1994. WHO guidelines and national standards for reuse and water quality. *Water Research* 28, 119–124.
- Heuer B, Meiri A & Shal hevet J 1986. Salt tolerance of egg plant. *Plant and Soil* 95, 9–13.
- Hibbs CM & Thilsted JP 1983. Toxicosis in cattle from contaminated well water. *Veterinary and Human Toxicology* 25, 253–254.
- Hilgeman RH, Fuller WH, True LF, Sharples GG & Smith DF 1970. Lithium toxicity in ‘marsh’ grapefruit in Arizona. I. Mortality experience in the factory. *British Journal of Industrial Medicine* 5, 1–6.
- Hodgson JF 1960. Cobalt reactions with montmorillonite. *Soil Science Society of America Proceedings* 24, 165–168.
- Holford ICR 1983. Effects of lime on phosphate sorption characteristics, and exchangeable and soluble phosphate in fifteen acid soils. *Australian Journal of Soil Research* 21, 33–42.
- Holford ICR 1997. Soil phosphorus: Its measurement, and its uptake by plants. *Australian Journal of Soil Research* 35, 227–239.
- Hopkins LL & Mohr LE 1971. The biological essentially of vanadium. In *Newer trace elements in nutrition*, eds W Mertz & WE Cornatzer, Marcel Dekker Inc, New York, 195–213.
- Hornburg V & Brümmer G 1989. Untersuchungen zur mobilitat und verfugbarkeit von metallen in boden. *Mitteilungen der Deutschen Bodenkundl Gesellschaft*. 59/II, 727–731.
- Horticultural development on the northern Adelaide plains: resources, opportunities and priorities* 1995a. The SA Centre for Economic Studies, Adelaide, SA.
- Horvath DJ 1976. Trace elements and health. In *Trace substances and health: A handbook*, Part 1, ed PM Newberne, Marcel Dekker Inc, New York, 319–356.
- Hu X 1999. Effluent irrigation in Queensland. *Journal of the Australian Water and Wastewater Association* May/June, 39–41.
- Humphries WR, MacPherson A & Farmer PE 1983. Drinking water as a carrier of trace elements for cattle. In *Trace elements in animal production and veterinary practice*. Occasional paper 7, eds NF Suttle, RG Gunn, WM Allen, KA Linklater & G Wiener, British Society of Animal Production, London, 143–144.
- Hunter HM 1992. *Agricultural contaminants in aquatic environments: A review*. Queensland Department of Primary Industries publication QB92002, Brisbane.
- International Atomic Energy Agency 1994. *Handbook of parameter values for the prediction of radionuclide transfer in temperate environments*. Technical report series TRS No 364, International Atomic Energy Agency, Vienna.
- IPCS 1990. *Beryllium: Environmental health criteria*. World Health Organization International Programme on Chemical Safety Publication 106, Geneva.
- James LF, Lazar VA & Binns W 1966. Effects of sublethal doses of certain minerals on pregnant ewes and foetal development. *American Journal of Veterinary Research* 27, 132–135.
- James E, Mebalds M, Beardsell D, van der Linden A & Tregea W 1996. *Development of recycled water systems for Australian nurseries*. Publication NY320, Horticultural Research & Development Corporation, Sydney.
- Jaster EH, Schuh JD & Wegner TN 1978. Physiological effects of saline drinking water on high producing dairy cows. *Journal of Dairy Science* 61, 66–71.

- Jaworski JF 1979. *Effects of lead in the environment—1978. Quantitative aspects*. NRC publication 16736, Associate Committee on Scientific Criteria for Environmental Quality, National Research Council of Canada, Ottawa.
- Johnson CM 1976. Selenium in the environment. *Residue Reviews* 62, 101–130.
- Jones CE, Konasewich DE, Bloodgood MA, Owen BD, Larratt HM, Gordon MR, McLeay DJ & Price WA (eds) 1994. *Review of research concerning molybdenum in the environment and implications to mine decommissioning*. Canada Centre of Mineral and Energy Technology, Victoria, BC.
- Jones GJ 1994. Bloom-forming blue-green algae (cyanobacteria). In *Water plants in Australia*, eds GR Sainty & SWL Jacobs, Sainty & Associates, Sydney, 266–285.
- Jones GJ, Falconer IF, Burch M & Craig K 1993. Cyanobacterial toxicity. In *Murray–Darling Basin Commission: Algal management strategy*. Technical Advisory Group reports, Canberra, 17–32.
- Jones GJ, Falconer IF & Wilkins RM 1995. Persistence of cyclic peptide toxins in dried cyanobacterial crusts from Lake Mokoan, Australia. *Water Quality* 10, 19–24.
- Jones GJ & Negri AP 1997. Persistence and degradation of cyanobacterial paralytic shellfish poisons (PSPs) in freshwaters. *Water Research* 31 (3), 525–533.
- Jones GJ & Orr PT 1994. Release and degradation of microcystin following algicide treatment of a *Microcystis aeruginosa* bloom in a recreational lake, as determined by HPLC and protein phosphatase inhibition assay. *Water Resources* 28, 871–876.
- Kammerer M, Pinault L & Pouliquen H 1992. Teneur en nitrate du lait. Relation avec sa concentration dans l'eau d'abreuvement. *Annales de Recherches Vétérinaires* 23, 131–138.
- Keating BA, Bauld J, Hillier J, Ellis R, Weier KI, Sunners F & Connell D 1996. Leaching of nutrients and pesticides to Queensland groundwaters. In *Downstream effects of land use*, eds HM Hunter, AG Eyles & GE Rayment, Queensland Department of Natural Resources, Brisbane, 151–163.
- Keck G 1995. Quality criteria of drinking water and hygiene of the agro-alimentary food-chain. Impact of aquatic pollutants on domestic animals and animal productions. *Revue de Medecine Veterinaire* 146, 815–820.
- Kelly GJ & Kemp RG 1975. *Guidelines for the selection of turbine pump materials for use in groundwaters*. Australian Water Resources Council technical paper 14, AGPS, Canberra.
- Kirkby CA, Smythe LJ, Cox JW & Chittleborough DJ 1997. Phosphorus movement down a toposequence from a landscape with texture contrast soils. *Australian Journal of Soil Research* 35, 399–417.
- Kuiper-Goodman T, Falconer I & Fitzgerald J 1999. Chapter 4 Human health aspects. In *Cyanobacteria in water: A guide to their public health consequences, monitoring and management*, eds I Chorus & J Bartram, 113–153, E&FN Spon, London.
- Langelier WF 1946. The analytical control of anti-corrosion water treatment. *Journal of the American Water Works Association* 28 (10), 1500–1521.
- Lantzke IR, Mitchell DS, Heritage AD, Sharma KP, Tanner CD, Raisin G, Ho G & Mitsch WJ 1999. A model of factors controlling orthophosphate removal in planted vertical flow wetlands. Special issue: Constructed and natural wetlands for pollution control. *Ecological Engineering* 12, 1–2, 93–105.
- Larsen RM, Ferguson J, Wade S, Hillier JR & Bauld J 1996. *Borehole corrosion in the Great Artesian Basin: Phase I*. AGSO Record 1996/44, Australian Geological Survey Organisation, Canberra.
- Larsen S & Widdowson AE 1971. Soil fluorine. *Journal of Soil Science* 22, 210–221.
- Lawrence CR 1983. *Nitrate-rich groundwaters of Australia*. Australian Water Resources Council Technical Paper 79, Australian Government Publishing Service, Canberra.
- Littleboy M 1997. Spatial generalisation of biophysical simulation models for quantitative land evaluation: A case study for dryland wheat growing areas of Queensland. PhD thesis, University of Queensland.
- Maas EV 1986. Salt tolerance of plants. *Applied Agricultural Research* 1, 12–25.
- Maas EV & Hoffman GJ 1977. Crop salt tolerance: Current assessment. *American Society of Civil Engineers: Journal of the Irrigation and Drainage Division* 103, 115–134.
- MacKenzie RD, Byerum RV, Decken CF, Happert CA & Langham RF 1958. Chronic toxicity studies II. Hexavalent and trivalent chromium administered in drinking water to rats. *AMA Archives in Industrial Health* 18, 232–234.
- MacLean AJ 1974a. Mercury in plants and retention of mercury by soils in relation to properties and added sulphur. *Canadian Journal of Soil Science* 54, 287–292.
- MacLean AJ 1974b. Effects of soil properties and amendments on the availability of zinc in soils. *Canadian Journal of Soil Science* 54, 369–378.
- MacLean AJ & Dekker AJ 1978. Availability of zinc in soils. *Canadian Journal of Soil Science* 58, 381–389.
- Marschner H 1995. *Mineral nutrition of higher plants*. Academic Press, London.
- Masscheleyn PH, Delaune RD & Patrick WH 1991. Effect of redox potential and pH on arsenic speciation and solubility in a contaminated soil. *Environmental Science and Technology* 25, 1414–1419.

- McFarlane JD, Judson GJ & Gouzos I 1990. Copper deficiency in ruminants in south-east of South Australia. *Australian Journal of Agricultural Research* 30, 187–193.
- McGrath SP 1995. Chromium and nickel. In *Heavy metals in soils*, ed BJ Alloway, Blackie Academic, London, 152–178.
- McIntosh GB 1981. Report on the 23rd Pig Liaison Group meeting, November 1981.
- McIntosh GB 1982. Report to the 24th Pig Liaison Group meeting, September 1982.
- McIntyre DS 1980. Exchangeable sodium, subplasticity and hydraulic conductivity of some Australian soils. *Australian Journal of Soil Research* 17, 115–120.
- McKee JE & Wolf HW 1963. *Water quality criteria*. Publication 3-A, Resources Agency of California, State Water Quality Control Board.
- McLaughlan RG 1996. *Water well deterioration: Diagnosis and control*. Technology Transfer Publication, National Centre for Groundwater Management, University of Technology, Sydney.
- McLaughlan RG & Knight MJ 1989. *Corrosion and encrustation in groundwater bores; a critical review*. Centre for Groundwater Management and Hydrogeology, University of New South Wales.
- McLaughlan RG, Knight MJ & Stuetz RM 1993. *Fouling and corrosion of groundwater wells: A research study*. National Centre for Groundwater Management, University of Technology, Sydney.
- McLaughlin MJ, Hamon RE, McLaren RG, Speir TW & Rogers SL 2000. A bioavailability-based rationale for controlling metal and metalloid contamination of agricultural land in Australia and New Zealand. *Australian Journal of Soil Research* (in review).
- McLaughlin MJ, Maier NA, Correll RL, Smart MK, Sparrow LA & McKay A 1999. Prediction of cadmium concentrations in potato tubers (*Solanum tuberosum* L) by pre-plant soil and irrigation water analyses. *Australian Journal of Soil Research* 37, 191–207.
- McLaughlin MJ, Tiller KG, Beech TA & Smart MK 1994. Soil salinity causes elevated cadmium concentrations in field-grown potato tubers. *Journal of Environmental Quality* 23, 1013–1018.
- McLaughlin MJ, Tiller KG, Naidu R & Stevens DP 1996. Review: The behaviour and environmental impact of contaminants in fertilizers. *Australian Journal of Soil Research* 34, 1–54.
- McLaughlin MJ, Tiller KG & Smart MK 1997. Speciation of cadmium in soil solution of saline/sodic soils and relationship with cadmium concentrations in potato tubers. *Australian Journal of Soil Research* 35, 1–17.
- McLeese JM, Tremblay ML, Patience JF & Christison GI 1992. Water intake patterns in the weanling pig: effect of water quality, antibiotics and probiotics. *Animal Production* 54, 135–142.
- MDBC 1999. *The salinity audit of the Murray–Darling Basin — A 100-year perspective*. Murray–Darling Basin Commission, Canberra ACT.
- Menzies JD 1967. Plant diseases related to irrigation. In *Irrigation of agricultural lands*, eds RM Hagan, HR Haise & TW Edminster, American Society of Agronomy, Madison, Wisconsin.
- Merian E (ed) 1984. *Metalle in der umwelt*. Springer Verlag Chemie, Weinheim.
- Merry RH & Tiller KG 1991. Distribution of cadmium and lead in an agricultural region near Adelaide, South Australia. *Water, Air and Soil Pollution* 57–58, 171–180.
- Merry RH, Tiller KG & Alston AM 1983. Accumulation of copper, lead and arsenic in Australian orchard soils. *Australian Journal of Soil Research* 21, 549–561.
- Metcalf G & Eddy I 1991. *Wastewater engineering*. McGraw Hill Inc, New Delhi.
- Meybeck M 1979. Concentrations des eaux fluviales en éléments majeurs et apports en solution aux océans. *Revue de Géologie Dynamique et de Géographie Physique* 21 (3), 215–246.
- Meybeck M 1982. Carbon, nitrogen and phosphorus transport by world rivers. *American Journal of Science* 282, 401–450.
- Miller HJ 1971. *Cadmium absorption, tissue and product distribution, toxicity effects and influence on metabolism of certain essential elements*. Proceedings of Georgia Nutrition Conference, University of Georgia, Athens, 58–59.
- Miller WJ, Lampp B, Powell GW, Salott CA & Blackman DM 1967. Influence of a high level of dietary cadmium and content in milk, excretion, and cow performance. *Journal of Dairy Science* 50, 1404–1408.
- Mills CF & Davis CK 1987. Molybdenum. In *Trace elements in animal nutrition*, 5th edn, vol 1, ed W Mertz, Academic Press, San Diego, 429–458.
- Milly PCD 1994. Climate, soil water storage, and the average annual water balance. *Water Resources Research* 30, 2143–2156.
- Miyamoto S 1980. Effects of bicarbonate on sodium hazard of irrigation water: Alternative formulation. *Soil Science Society of America Journal* 44, 1079–1084.
- Moen JET, Cornet JP & Evers CWA 1986. Soil protection and remedial actions: Criteria for decision making and standardisation of requirements. In *Contaminated soils*, eds JW Assink & WJ van den Brink, Martinus Nijhoff, Dordrecht, 441–448.

- Monnett GT, Reneau RB & Hagedorn C 1995. Effects of domestic wastewater spray irrigation on denitrification rates. *Journal of Environmental Quality* 24, 940–946.
- Morishima H, Koga T, Kawai H, Honda Y & Katsurayama K 1977. Studies on the movement and distribution of uranium in the environment-distribution of uranium in agricultural products. *Journal of Radiation Research* 18, 139–150.
- Mulhearn CJ 1964. Water for livestock. *Journal of the Department of Agriculture, South Australia* 68, 20–27.
- NAS 1971. *Fluorides: Biological effects of atmospheric pollutants*. National Academy of Sciences, Washington DC.
- NAS 1974. *Chromium: Medical and biological effects of environmental pollution*. National Academy of Science, Washington DC.
- NAS 1977a. *Arsenic: Medical and biological effects of environmental pollution*. National Academy of Science, Washington DC.
- NAS 1977b. *Copper: Medical and biological effects of environmental pollution*. National Academy of Science, Washington DC.
- NAS (National Academy of Science) & NAE (National Academy of Engineers) 1973. Committee of Water Quality. *Water quality criteria 1972*. Publication 3-A, Environmental Studies Board, State Water Quality Control Board, Washington DC.
- Nash D & Murdoch C 1997. Phosphorus in runoff from a fertile dairy pasture. *Australian Journal of Soil Research* 35, 419–429.
- Neathery WM & Miller WJ 1977. Tolerance levels, toxicity and essential trace elements for livestock and poultry. Part I: Cattle and sheep. *Feedstuffs* 49, 18–20.
- Negri, AP, Jones GJ, Blackburn SI, Oshima Y & Onodera H 1997. Effect of culture and bloom development and of sample storage on paralytic shellfish poisons in the cyanobacterium *Anabaena circinalis*. *Journal of Phycology* 33, 26–35.
- Negri AP, Jones GJ & Hindmarsh M 1995. Sheep mortality associated with paralytic shellfish poisons from the cyanobacterium *Anabaena circinalis*. *Toxicon* 33, 1321–1329.
- New Zealand DoH (Department of Health) 1992. *Public health guidelines for the safe use of sewage effluent and sewage sludge on land*. New Zealand Department of Health, Wellington.
- NHMRC & ARMCANZ 1996. *Australian drinking water guidelines*. National Water Quality Management Strategy Paper No 6, National Health and Medical Research Council & Agricultural and Resource Management Council of Australia and New Zealand, AGPS, Canberra.
- Nielsen FH & Ollerich DA 1974. Nickel: A new essential trace element. *FASEB Journal*. 33, 1767–1772.
- NRC (National Research Council) 1980. *Mineral tolerance of domestic animals*. National Academy of Sciences, Washington, DC.
- NRC 1988. *Nutrient requirements of dairy cattle*. 6th rev edn, National Academy of Sciences, Washington, DC.
- NRC 1996. *Nutrient requirements of beef cattle*. 7th rev edn, National Academy of Sciences, Washington, DC.
- NRCC 1976. *Effects of chromium in the Canadian environment*. National Research Council of Canada publication 15017, Associate Committee on Scientific Criteria for Environmental Quality, Ottawa.
- NRCC 1979. *Effects of mercury in the Canadian environment*. National Research Council of Canada publication 16739, Associate Committee on Scientific Criteria for Environmental Quality, Ottawa.
- NRCC 1981. *Effects of nickel in the Canadian environment*. National Research Council of Canada publication 18568, Associate Committee on Scientific Criteria for Environmental Quality, Ottawa.
- NSWEPA 1995a. *Environment management guidelines for the use and disposal of biosolid products*. New South Wales Environmental Protection Agency, Sydney.
- NSWEPA 1995b. *Draft environmental guidelines for industry: The utilisation of treated effluent by irrigation*. New South Wales Environmental Protection Agency publication 95/20, Bankstown, NSW.
- NSWEPA 1998. *Draft phytotoxicity investigation levels*. New South Wales Environmental Protection Agency, Sydney.
- The New South Wales feedlot manual* 1995. 2nd edn, NSW Agriculture, Orange, NSW, Australia.
- O'Dell GD, Miller WJ, King WA, Moor SL & Blackmon DJ 1970. Nickel toxicity in the young bovine. *Journal of Nutrition* 100, 1447–1454.
- Oldfield JE, Aliaway WH, Laitinen HA, Lakin HW & Muth OH 1974. Selenium. In *Geochemistry and environment*. vol 1: The relation of selected trace elements to health and disease. National Academy of Science, Washington DC, 57–63.
- Oliver DO, Hannam R, Tiller KG, Wilhelm NS, Merry RH & Cozens GD 1994. The effects of zinc fertilisation on cadmium concentration in wheat grain. *Journal of Environmental Quality* 23, 705–11.

- Olson ME, McAllister TA, Deselliers L, Morck DW, Cheng KJ, Buret AG & Ceri H 1995. Effects of giardiasis on production in a domestic ruminant (lamb) model. *American Journal of Veterinary Research* 56 (11), 1470–1474.
- Olszowy H, Torr P & Imray P 1995. *Trace element concentration in soils from rural and urban areas of Australia*. Contaminated Sites Monograph Series 4. South Australian Health Commission, Adelaide.
- Oster JD & Rhoades JD 1975. Calculated drainage water composition and salt burdens resulting from irrigation with river waters in the western United States. *Journal of Environmental Quality* 4, 73–79.
- O’Sullivan DB & Kiley TL 1996. Status of Australian aquaculture. *Austasia Aquaculture Magazine*, Trade Directory 1996.
- Oswiler GD & Ruhr LP 1978. Lead poisoning in feeder calves. *Journal of the American Veterinary Medical Association* 172, 498–500.
- Palmer JS, Wright FC & Hauffler H 1973. Toxicological and residual aspects of alkylmercury fungicide to cattle, sheep and turkeys. *Clinical Toxicology* 6, 425–437.
- Papadopoulos I 1993. Use of treated effluents for irrigation. I. Wastewater quality and quality guidelines. In *Advanced Short Course on Sewage Treatments–Practices–Management for agriculture use in the Mediterranean Countries*. Cairo, Egypt, 8–20 February 1993, CIHEAM (Centre International de Hautes Etudes Agronomiques Mediterraneennes), Paris.
- Parisic AF & Vallee BL 1969. Zinc metalloenzymes: Characteristics and significance in biology and medicine. *American Journal of Clinical Nutrition* 22, 1222.
- Parris K 1998. Agricultural nutrient balances as agri-environmental indicators: an OECD perspective. *Environmental Pollution* 102, 219–225.
- Pearson GA 1960. *Tolerance of crops to exchangeable sodium*. Agricultural Information Bulletin 206, Agriculture Research Service, US Department of Agriculture, Washington DC.
- Peirce AW 1960. Studies of salt tolerance of sheep. III: The tolerance of sheep for mixtures of sodium chloride and calcium chloride in the drinking water. *Australian Journal of Agricultural Research* 11 (4), 548–556.
- Peirce AW 1966. Studies of salt tolerance of sheep. VI: The tolerance of wethers in pens for drinking water of the types obtained from underground sources in Australia. *Australian Journal of Agricultural Research* 17, 209–218.
- Peirce AW 1968a. Studies of salt tolerance of sheep. VII: The tolerance of ewes and their lambs in pens for drinking water of the types obtained from underground sources in Australia. *Australian Journal of Agricultural Research* 19, 577–587.
- Peirce AW 1968b. Studies of salt tolerance of sheep. VIII: The tolerance of grazing ewes and their lambs for drinking water of the types obtained from underground sources in Australia. *Australian Journal of Agricultural Research* 19, 589–595.
- Pescod MB 1992. *Wastewater treatment and use in agriculture*. FAO Irrigation and Drainage Paper 47, United Nations, Rome.
- Phillippo M, Humphries WR, Atkinson T, Henderson BD & Garthwaite PH 1987. The effect of dietary molybdenum and iron on copper status, puberty, fertility, and oestrous cycles in cattle. *Journal of Agricultural Science, Cambridge* 109, 321–336.
- Powell GW, Miller WJ, Morton JD & Clifton CM 1964. Influence of dietary cadmium level and supplemental zinc on cadmium toxicity in the bovine. *Journal of Nutrition* 84, 205–214.
- Queensland Water Quality Task Force 1992. *Fresh water algal blooms in Queensland*, vol 1: main report. Queensland Department of Natural Resources, Brisbane.
- Rayment GE & Hamilton DJ 1997. Chemical contamination of soil, water and produce. In *Sustainable crop production in the sub tropics: an Australian perspective*, eds AL Clarke & PB Wylie, pp 150–169. Queensland Department of Primary Industries, Brisbane.
- Rayment GE & Higginson FR 1992. Electrical conductivity/total soluble salts. In *Australian laboratory handbook of soil and water chemical methods*. Inkata Press, Melbourne, 217–223.
- Reeder S, Demayo A & Taylor M 1979. *Guidelines for surface water quality*, vol 1: Inorganic chemical substances. Mercury. Inland Waters Directorate, Environment Canada, Ottawa.
- Reid DF, Sackett WM & Spalding RF 1977. Chromium and radium in livestock feed supplements. *Health Physics* 32, 535–540.
- Rengasamy P & Olsson KA 1995. Irrigation and sodicity: An overview. In *Australian sodic soils: Distribution, properties and management*, eds R Naidu, ME Sumner & P Rengasamy, CSIRO Publications, East Melbourne, 195–204.
- Ressom R, San Soong F, Fitzgerald J, Turczynowicz L, El Sadi O & Roder D 1994. *Health effects of toxic cyanobacteria (blue-green algae)*, Report to the Environmental Health Standing Committee and National Health and Medical Research Council. University of Adelaide/South Australian Health Commission, Adelaide.

- Rhoades JD 1972. Quality of water for irrigation. *Soil Science* 113, 277–284.
- Rhoades JD 1982. Reclamation and management of salt-affected soils after drainage. In *Rationalisation of water and soil research and management*, Proceedings of the First Annual Western Provincial Conference, Lethbridge, Canada, 123–197.
- Rhoades JD 1983. *Using saline waters for irrigation*. International Workshop on Salt-affected Soils of Latin America, October 1983, Venezuela.
- Rhoades JD & Merrill SD 1976. *Assessing the suitability of water for irrigation: Theoretical and empirical approaches. Prognosis of Salinity and Alkalinity*. Report of an expert consultation, FAO, Rome, 69–109.
- Ritchie GSP & Weaver DM 1993. Phosphorus retention and release from sandy soils of the Peel–Harvey catchment. *Fertilizer Research* 36, 115–122.
- Robards GE & Radcliffe JC (eds) 1987. Water requirements of pigs. In *Feeding standards for Australian livestock: Pigs*. Pig Sub-Committee, Standing Committee on Agriculture, Melbourne, 85–93.
- Robertson BM, Magner T, Dougan A, Holmes MA & Hunter RA 1996. The effect of coal mine pit water on the productivity of cattle. I: Mineral intake, retention, and excretion and the water balance in growing steers. *Australian Journal of Agricultural Research* 47, 961–974.
- Rolf C, Currey A & Atkinson I 1994. *Managing water in plant nurseries*. NSW Agriculture, Horticultural Research and Development Corporation and Nursery Industry Association of Australia, Sydney.
- Romney EM & Childress JD 1965. Effects of beryllium in plants and soil. *Soil Science* 100, 210–217.
- Romoser GL, Dudley WA, Machlin LJ & Loveless L 1961 Toxicity of vanadium and chromium for growing chicken. *Poultry Science* 40, 1171–1173.
- Rose CW, Dayananda PWA, Nielson DR & Biggar JW 1979. Long-term solute dynamics and hydrology in irrigated slowly permeable soils. *Irrigation Science* 1, 77–87.
- Rose JB & Gerba CP 1991. Assessing potential health risks from viruses and parasites in reclaimed water in Arizona and Florida, USA. *Water Science Technology* 23, 2091–2098.
- Rose D & Marier JR 1978. *Environmental fluoride 1977*. National Research Council of Canada publication 16081, Associate Committee on Scientific Criteria for Environmental Quality, Ottawa.
- Rossum JR & Merrill DT 1983. An evaluation of the calcium carbonate saturation indexes. *Journal of the American Water Works Association* 75 (2), 95–100.
- Russell JS 1976. Comparative salt tolerance of some tropical and temperate legumes and tropical grasses. *Australian Journal of Experimental Agriculture and Animal Husbandry* 16, 103–109.
- Ryznar JW 1944. A new index for determining the amount of calcium carbonate scale formed by water. *Journal of the American Water Works Association* 36 (4), 472–483.
- SAEPA 1996. *South Australian biosolids guidelines*. South Australian Environmental Protection Authority, Department of Environment and Natural Resources, Adelaide.
- Salameh Al Jamal M, Sammis TW & Jones T 1997. Nitrogen and chloride concentration in deep soil cores related to fertilization. *Agricultural Water Management* 34, 1–16.
- Salomons W & Förstner U 1984. *Metals in the hydrocycle*. Springer-Verlag, Berlin.
- Sanders JR 1982. The effect of pH upon the copper and cupric ion concentrations in soil solutions. *Journal of Soil Science* 33, 679–689.
- Sauer MR 1958. Boron content of sultana vines in the Mildura area. *Australian Journal of Agricultural Research* 9, 123–128.
- Saul GR & Flinn PC 1978. The effect of saline bore water on the growth of weaner cattle. *Proceedings of the Australian Society of Animal Production* 12, 284.
- Saul GR & Flinn PC 1985. Effects of saline drinking water on growth and water and feed intakes of weaner heifers. *Australian Journal of Experimental Agriculture* 25, 734–738.
- Sceswell G & Huett D 1998. Plant nutrition. In *Australian Vegetable Growing Handbook*, ed J Salvestrin, pp. 89–105. Scope Publishing Pty Ltd, Frankston, Victoria, Australia.
- Schachtschabel P, Blume HP, Brummer G, Hartge KH & Schwertman U 1989. *Lehrbuch der bodenkunde*. 12 auflage, Ferdinand Enke Verlag, Stuttgart.
- Schmitz RJ 1996. *Introduction to Water Pollution Biology*. Gulf Publishing Company, Houston, Texas.
- Schofield CS 1936. The salinity of irrigation water. In *Annual Report of the Smithsonian Institute*, Washington DC, 275–287.
- Schofield NJ & Simpson BW 1996. Pesticides: An emerging issue for water and the environment. *Australian Journal of Water Resources* 1 (2), 91–97.
- Schroeder HA, Balassa JJ & Vinton WH Jr 1964. Chromium, lead, cadmium, nickel and titanium in mice. Effect on mortality, tumours and tissue levels. *Journal of Nutrition* 83, 239–250.

- Schroeder HA & Mitchener M 1971. Toxic effects of trace elements in the reproduction of mice and rats. *Archives of Environmental Health* 23, 102–106.
- Schroeder HA & Mitchener M 1975a. Life term studies in rats: effects of aluminium, barium, beryllium and tungsten. *Journal of Nutrition* 105, 421–427.
- Schroeder HA & Mitchener M 1975b. Life term effects of mercury, methylmercury and nine other trace metals on mice. *Journal of Nutrition* 105, 452–458.
- Scott-Fordsmand JJ & Pederson MB 1995. *Soil quality criteria for selected inorganic compounds*. Arbejdsrapport fra Miljøstyrelsen working report 48, Danish Environmental Protection Agency, Ministry of Environment and Energy, Denmark.
- Seerley RW, Emerick RJ, Embry LB & Olson OE 1965. Effect of nitrate or nitrite administered continuously in drinking water for swine and sheep. *Journal of Animal Science* 24, 1014–1019.
- Sen Tran T, Fardeau JC & Giroux M 1988. Effects of soil properties on plant-available phosphorus determined by the isotopic dilution phosphorus-32 method. *Soil Science Society of America Journal* 52, 1383–1390.
- Sharpley AN 1993. Assessing phosphorus bioavailability in agricultural soils and runoff. *Fertilizer Research* 36, 259–272.
- Shaw RJ 1986. Towards a quantitative irrigation water quality assessment model for Australia. A report of studies during a 1984 Churchill Fellowship in Israel and USA, Queensland Department of Primary Industries Study tour report.
- Shaw RJ 1994. *Estimation of the electrical conductivity of saturation extracts from the electrical conductivity of 1:5 soil water suspensions and various soil properties*. Queensland Department of Primary Industries Report QO94025, Brisbane.
- Shaw RJ 1996. A unified soil property and sodicity model of salt leaching and water movement. Department of Agriculture, University of Queensland, PhD thesis.
- Shaw RJ & Dowling AJ 1985. Principles of landscape soil and water salinity: Processes and management options. Part B, in *Proceedings of Lockyer Moreton Salinity Workshop*. Queensland Department of Primary Industries Publication QC 85004, Brisbane.
- Shaw RJ & Hughes KK 1981. Salinity in agriculture: A challenge for land management. Paper presented at 51st ANZAAS Congress, Section 13, Brisbane 1981.
- Shaw RJ & Thorburn PJ 1985. Prediction of leaching fraction from soil properties, irrigation water and rainfall. *Irrigation Science* 6, 73–83.
- Shaw RJ, Thorburn PJ & Dowling AJ 1987. Principles of landscape, soil and water salinity: Processes and management options. Part A, in *Landscape, soil and water salinity*, Proceedings of Brisbane Region Salinity Workshop, Brisbane, May 1987. Queensland Department of Primary Industries, Publication QC 87003, Brisbane.
- Shaw RJ & Yule 1978. *The assessment of soils for irrigation, Emerald, Queensland*. Agricultural Chemistry Branch Technical Report 13, Queensland Department of Primary Industries, Brisbane.
- Shockley DR 1955. Capacity of soil to hold moisture. *Agricultural Engineering* 109–112.
- Singer RH 1976. Chronic lead poisoning in horses. *Proceedings of the Annual Meeting of the Association of Veterinary Laboratory Diagnosticians* 18, 395–405.
- Singh B & Gilkes RJ 1991. Phosphorus sorption in relation to soil properties for the major soil types of south-western Australia. *Australian Journal of Soil Research* 29, 603–618.
- Skene JKM 1965. The diagnosis of alkali soils. *Journal of the Australian Institute of Agricultural Science* 31, 321–322.
- Slattery WJ, Conyers MK & Aitken RL 1999. Soil pH, aluminium, manganese and lime requirement. Chapter 7, in *Soil Analysis and Interpretation Manual*, eds KI Peverill, LA Sparrow & DJ Reuter, pp 103–128, CSIRO Publishing, Collingwood Vic.
- Smith CJ, Freney JR & Bond WJ 1996. Ammonia volatilisation from soil irrigated with urban sewage effluent. *Australian Journal of Soil Research* 34, 789–802.
- Smith HA, Jones TC & Hunt RD 1974. *Veterinary pathology*. 4th edn, Lea & Febiger, Philadelphia, Pennsylvania.
- Smith MA, Kaddous FGA, Stubbs KJ, McNeill, Irving LG, Ward BK & Kerr R 1983. Growth of vegetables and the retention of bacteria, viruses and heavy metals on crops irrigated with reclaimed water. In *Australian Water and Wastewater*, ed RT Kelly, Proceedings of AWWA Federal Convention, 10 April 1983, Sydney, pp 33,1–33,28. AWWA, Sydney.
- Smith KA & Paterson JE 1995. Manganese and cobalt. In *Heavy metals in soils*, ed BJ Alloway, Blackie Academic, London, 152–178.
- Smolders E & McLaughlin MJ 1996. Chloride increases cadmium uptake in swiss chard in a resin-buffered nutrient solution. *Soil Science Society of America Journal* 60, 1443–1447.
- Snoeyink VL & Jenkins D 1980. *Water chemistry*. John Wiley & Sons, New York.

- Snow VO, Dillon PJ, Bond WJ, Smith CB & Myers BJ 1999. Groundwater contamination from effluent irrigation water, *Journal of the Australian Water and Wastewater Association* 26, 26–29.
- Solomon R, Miron J, Ben-Ghedalia D & Zomberg Z 1995. Performance of high producing dairy cows offered drinking water of high and low salinity in the Arava Desert. *Journal of Dairy Science* 78, 620–624.
- Sorensen MT, Jensen BB & Poulsen HD 1994. Nitrate and pig manure in drinking water to early weaned piglets and growing pigs. *Livestock Production Science* 39, 223–227.
- Spouncer LR & Mowat DJ 1991a. Boron and other elements in soils and cereal crops from dune/swale systems in South Australia. 1: Wanbi Research Station. Technical Memorandum 42/1990, CSIRO Division of Soils, Adelaide.
- Spouncer LR & Mowat DJ 1991b. Boron and other elements in soils and cereal crops from dune/swale systems in South Australia. 2: The Murray Mallee District. Technical Memorandum 7/1991, CSIRO Division of Soils, Adelaide.
- Spouncer LR & Mowat DJ 1991c. Boron and other elements in soils and cereal crops from dune/swale systems in South Australia. 3: The Eyre Peninsula. Technical Memorandum 23/1991, CSIRO Division of Soils, Adelaide.
- Spouncer LR & Mowat DJ 1991d. Boron and other elements in soils and cereal crops from dune/swale systems in South Australia. 4: Upper South East. Technical Memorandum 43/1991, CSIRO Division of Soils, Adelaide.
- State Government of Victoria 1995. *Nutrient management strategy for Victorian inland waters*. March, Melbourne.
- Steffensen D, Burch M, Nicholson B, Drikas M & Baker P 1998. Management of toxic blue-green algae (Cyanobacteria) in Australia. *Environmental Toxicology* 14, 183–195.
- Stevens DP, Cox JW & Chittleborough DJ 1999. Pathways of phosphorus, nitrogen, and carbon movement over and through texturally differentiated soils, South Australia. *Australian Journal of Soil Research* 37, 679–93.
- Stevens DP, McLaughlin MJ & Alston AM 1997. Phytotoxicity of aluminium-fluoride complexes and their uptake from solution culture by *Avena sativa* and *Lycopersicon esculentum*. *Plant and Soil* 192 (1), 81–93.
- Stevens DP, McLaughlin MJ & Alston AM 1998a. Phytotoxicity of the fluoride ion and its uptake from solution culture by *Avena sativa* and *Lycopersicon esculentum*. *Plant and Soil* 200, 119–129.
- Stevens DP, McLaughlin MJ & Alston AM 1998b. Phytotoxicity of hydrogen fluoride and fluoroborate and their uptake from solution culture by *Avena sativa* and *Lycopersicon esculentum*. *Plant and Soil* 200, 175–184.
- Streichner MA 1949. The dissolution of aluminium in sodium hydroxide solutions. *Journal of the Electrochemistry Society* 96 (3), 170–194.
- Suarez DL 1981. Relationship between  $pH_c$  and sodium adsorption ratio (SAR) and an alternative method of estimating SAR of soil or drainage waters. *Soil Science Society of America Journal* 45, 469–475.
- Supplee WC 1961. Production of zinc deficiency in turkey poults by dietary cadmium. *Poultry Science* 40, 827–828.
- Thompson A, Hansard SL & Bell MC 1959. The influence of aluminum and zinc upon the absorption and retention of calcium and phosphorus in lambs. *Journal of Animal Science* 18, 187.
- Thorburn PJ & Gardner EA 1986. Plant available water capacity of irrigated soils. In Proceedings of irrigation workshop, Queensland Agricultural College, Lawes, June 1986, Queensland Department of Primary Industries Publication QC86001, Brisbane, 19–32.
- Thorburn PJ, Rose CW, Shaw RJ & Yule DF 1987. SODICS: A program to calculate solute dynamics in irrigated clay soils. In *Landscape, soil and water salinity*. Proceedings of the Bundaberg Regional Workshop, Bundaberg, April 1987, Conference and workshop series QC87001, Department of Primary Industries, Queensland, B12–1 to B12–9.
- Tiller AK 1982. Aspects of microbial corrosion. In *Corrosion Processes*, ed RN Parkins, Applied Science Publishers, London.
- Tiller KG 1983. Micronutrients. In *Soils: An Australian viewpoint*. Division of soils, CSIRO, Melbourne and Academic Press, London, 365–387.
- Treseder RS 1981. Guarding against hydrogen embrittlement. *Chemical Engineering* 18 (13), 105–108.
- Ulen B 1998. Phosphorus losses to waters from arable fields and reference water catchments in relation to phosphorus status of soils. Phosphorus balance and utilization in agriculture — towards sustainability, proceedings of a seminar, 17–19 March 1997. *Kungl.-Skogs-och-Lantbruksakademiens-Tidskrift* 137, 167–175.
- UN 1993. *Sources and effects of ionizing radiation*. United Nations Scientific Committee on the Effects of Atomic Radiation, 1993 Report to the General Assembly United Nations, New York.
- Underwood EJ 1971. *Trace elements in human and animal nutrition*. 3rd edn, Academic Press Inc, New York.
- Underwood EJ 1977. *Trace elements in human and animal nutrition*. 4th edn, Academic Press Inc, New York.

- University of Nebraska 1997. *Journal of the American Water Works Association*. Unit 1: Pests and pest control. Nebraska.
- USEPA 1992. *Manual: Guidelines for water reuse*. Technical report 81, United States Environmental Protection Agency, Office of Water & Office of Research and Development, Washington DC.
- USSL (United States Salinity Laboratory) 1954. *Diagnosis and improvement of saline and alkali soils*. Agricultural Handbook 60, US Department of Agriculture, Washington DC.
- Valdivia R, Ammerman CB, Wilcox CJ & Henry PR 1978. Effect of dietary aluminium on animal performance and tissue minerals levels in growing steers. *Journal of Animal Science* 47, 1351–1356.
- Van der Molen DT, Breeuwsma A & Boers PCM 1998. Agricultural nutrient losses to surface water in the Netherlands: Impact, strategies, and perspectives. *Journal of Environmental Quality* 27, 4–11.
- Van Halderen A, Harding WR, Wessels JC, Schneider DJ, Heine EWP & Van der Merwe J 1995. Cyanobacterial (blue-green algae) poisoning of livestock in the Western Cape Province of South Africa. *Tydskrif van die Suid-Afrikaanse Veterinere Vereniging* (Journal of the South African Veterinary Association) 66 (4), 260–264.
- Van Hensburn SWJ & de Vos WH 1966. Influence of excess fluorine intake in the drinking water of reproductive efficiency in bovines. *Onderstepoort Journal of Veterinary Research* 33 (1), 185–194.
- Vanselow AP 1966. Cobalt. In *Diagnostic criteria for plant and soils*, ed HD Capman, Division of Agriculture Science, University of California, Berkeley, 142–156.
- Van Zinderen Bakker EM & Javorski JF 1980. *Effects of vanadium in the Canadian environment*. NRCC publication 18132 94, Associate Committee on Scientific Criteria for Environmental Quality, National Research Council of Canada, Ottawa.
- VIRASC 1969 *Quality aspects of farm water supplies*. 1st edn, Victorian Irrigation Research and Advisory Services Committee, Victoria.
- VIRASC 1980. *Quality aspects of farm water supplies*. 2nd edn, Victorian Irrigation Research and Advisory Services Committee, Victoria.
- von Judel GK & Stelte W 1977. Gefassversuche mit Gemusepflanzen zur Frage de Bleiaufnahme aus dem Boden. *Zeitschrift fuer Pflanzenernaehrung und Bodenkunde* 140, 421–429.
- von Steiglitz CR 1961. Notes on waters for irrigation and stock use. Extension staff training school notes. Agricultural Chemist, Queensland Department of Agriculture and Stock, Brisbane.
- Wallace A, Alexander GV & Chadbury FM 1977. Phytotoxicity of cobalt, vanadium, titanium, silver and chromium. *Communications in Soil Science and Plant Analysis* 8, 751–756.
- Ward BK, Irving LG & Smith MA 1981. Use of reclaimed water for irrigation of vegetables. In *Ninth Federal Convention Technical Papers*. Australian Water & Wastewater Association, Perth, 1981, 20–1 to 20–7.
- Warrington K 1955. The influence of iron supply on toxic effects of manganese molybdenum, vanadium in soybeans, peas and flax. *Annals of Applied Biology* 44, 1–22.
- Webb DV, Solomon SB & Thompson JEM 1999. Background radiation levels and medical exposure levels in Australia. *Radiation Protection in Australia* 16(2), 25.
- Weeth HJ & Capps DL 1972. Tolerance of growing cattle for sulphate-water. *Journal of Animal Science* 34 (2), 256–260.
- Weeth HJ & Hunter JE 1971. Drinking of sulphate-water by cattle. *Journal of Animal Science* 32 (2), 277–281.
- West DW & Francois 1982. Effects of salinity on germination growth and yield of cow pea. *Irrigation Science* 3, 169–175.
- Westcot, DW & Ayers RS 1984. Irrigation water quality criteria. In *Irrigation with reclaimed wastewater: A guidance manual*. Report No 81–1 WR. California State Water Resources Control Board.
- Whitton BA 1973. Freshwater plankton. In *The biology of blue-green algae*, eds NG Carr & BA Whitton, Blackwell Scientific Publications, Oxford, 353–367.
- WHO 1970. Fluorides and human health. World Health Organisation Monograph Series 59, Geneva.
- WHO 1981. The risk to health of microbes in sewage sludge applied to land. Euro report and studies 54, World Health Organisation, Geneva.
- WHO 1984. *Guidelines for drinking water quality*. Vol 2: Health criteria and other supporting information. World Health Organisation, Geneva.
- WHO 1989. Health guidelines for the use of wastewater in agriculture and aquaculture. WHO technical report series no. 778, World Health Organisation, Geneva.
- WHO 1993. *Guidelines for drinking water quality*. Vol 1: Recommendations. 2nd edn, World Health Organisation, Geneva.
- Wilcox LV 1958. *Determining the quality of irrigation water*. Agricultural Information Bulletin No 197, United States Department of Agricultural Research Services, Washington DC.

- Will ME & Suter GW 1994a. Toxicological benchmarks for screening potential contaminants of concern for effects on terrestrial plants: 1994 revision. Report ES/ER/TM-85/R1, Oak Ridge National Laboratory, Oak Ridge, Tennessee.
- Will ME & Suter GW 1994b. Toxicological benchmarks for screening potential contaminants of concern for effects on soil and litter invertebrates and heterotrophic process. Report ES/ER/TM-126, Oak Ridge National Laboratory, Oak Ridge, Tennessee.
- Williams JH & Gostrik K 1981. Water quality for crop irrigation: guidelines on chemical criteria. Fisheries and food leaflet 776, Ministry of Agriculture, United Kingdom.
- Williams KC 1990. Water: Quality and needs. In *Pig production in Australia*, eds JAA Gardner, AC Dunkin & LC Lloyd, Butterworths, Sydney, 62–65.
- Williams RJB & LeRiche HH 1968. The effect of traces of beryllium on the growth of kale, grass and mustard. *Plant Soil* 29, 317–326.
- Wilson L & Johnson A 1997. Agriculture in the Australian economy. In *Australian agriculture*, Morescope Publishing Pty Ltd, Hawthorn East, Victoria, 7–18.
- Winks WR 1963. Safe waters for stock. *Queensland Agriculture Journal* 89, 723–728.
- Woolson EA 1973. Arsenic phytotoxicity and uptake in six vegetable crops. *Weed Science* 21, 524–527.
- Wright RJ, Botigor VC & Wright SF 1987. Estimation of phytotoxic aluminium in soil solution using three spectrometric methods. *Soil Science* 44, 224–232.
- Yaalon DH 1983. Climate, time and soil development. In *Pedogenesis and soil taxonomy*. 1. Concepts and interactions, eds LP Wilding, NE Smeck & GF Hall, Elsevier Science Publishers, Amsterdam. 233–251.
- Yoselwitz I & Belnave D 1989. Responses in egg shell quality to sodium chloride supplementation of the diet/or drinking water. *British Poultry Science* 30, 273–281.
- Zhukov BI & Zudilkin NV 1971. Effect of uranium on the yield of spring wheat. *Radiobiology* (English translation) 11, 466–469.

*This page has been left blank intentionally.*

## Section 9.4 Aquaculture and human consumers of aquatic foods

- ABARE 1999. *Australian fisheries statistics 1998*. Canberra.
- Acosta BO & Pullin RSV (eds) 1991. *Environmental impact of the golden snail (Pomacea sp.) on rice farming systems in the Philippines*. Proceedings of the International Centre for Aquatic Resources Management (ICLARM) Conference. Manila, Philippines. ICLARM.
- Alabaster JS & Lloyd R 1982. *Water quality criteria for freshwater fish*. Butterworths, London.
- Allen GL, Maguire GB & Hopkins SJ 1990 Acute and chronic toxicity of ammonia to juveniles *Metapenaeus macleayi* and *Penaeus monodon* and the influence of low dissolved oxygen levels. *Aquaculture* 91, 265–280.
- Alzieu C 1986. TBT detrimental effects on oyster culture in France: Evolution since antifouling paint regulation. *Institute Francais de Recherche* 1049, 1130–1134.
- Anderson I 1993. The veterinary approach to marine prawns. In *Aquaculture for veterinarians: Fish husbandry and medicine*, ed L Brown, Pergamon Press, Oxford, 271–296.
- ANZECC 1992. *Australian water quality guidelines for fresh and marine waters*. National Water Quality Management Strategy Paper No 4, Australian and New Zealand Environment and Conservation Council. Canberra.
- ANZFA 1996. *Food standards code*. Australia New Zealand Food Authority, AGPS, Canberra (including amendments to June 1996).
- APHA, AWWA & WEF 1995. *Standard methods for the examination of water and wastewater*. American Public Health Association, American Water Works Association and Water Environment Federation, Washington, USA, 2–1 to 2–3.
- ASSAC 1997. *Australian shellfish sanitation control program operations manual*. Australian Shellfish Sanitation Advisory Committee, Canberra.
- Atchinson GJ, Henry MG & Sandheinrich MB 1987. Effects of metals on fish behaviour: A review. *Environmental Biology of Fishes* 18 (1), 11–25.
- Austin B & Austin DA 1993. *Bacterial fish pathogens: Disease in farmed and wild fish*. 2nd edn, Chichester, Ellis Horwood Ltd.
- Ayres PA 1991. The status of shellfish depuration in Australia and south-east Asia. In *Molluscan shellfish depuration*, eds WS Otwell, GE Rodrick & RE Martin, CRC Press, Boca Raton, FL, 287–322.
- Barron MG 1990. Bioconcentration. *Environmental Science and Technology* 24(11), 1612–1618.
- Battaglione S 1996. Sea cages and the environment. In *NFRI Marine Finfish Farming: Proceeding of a Workshop*, ed N Quartararo, NSW Fisheries, Cronulla.
- Boyd CE 1989. *Water quality management and aeration in shrimp farming*. Fisheries and Allied Aquacultures Departmental Series no 2, Alabama Agricultural Experiment Station, Auburn University, Alabama.
- Boyd CE 1990. *Water quality in ponds for aquaculture*. Alabama Agricultural Experiment Station, Auburn University, Alabama.
- Boyd CE & Fast AW 1992 Pond monitoring and management. In *Marine shrimp culture: principles and Practices*. eds AW Fast & LJ Lester, Elsevier Science Publications, Amsterdam, 497–513.
- Boyd CE & Walley WW 1975. *Total alkalinity and hardness of surface waters in Alabama and Mississippi*. Alabama Agricultural Experiment Station Bulletin, No. 465, Auburn University Press, Birmingham, Alabama.
- Brune DE & Tomasso JR 1991. Aquaculture water quality: The emergence of an applied discipline. In *Aquaculture and water quality: Advances in world aquaculture*, eds DE Brune & JR Tomasso, World Aquaculture Society, Baton Rouge, 11–20.
- Calabrese A, MacInnes JR, Nelson DA & Miller JE 1977. Survival and growth of bivalve larvae under heavy-metal stress. *Marine Biology* 41, 179–184.
- CCME (Canadian Council of Resource and Environment Ministers) 1993. *Canadian Water Quality Guidelines*. Inland Water Directorate, Environment Canada, Ontario.
- Chapman PM, Allen HE, Godtfredsen K & Z'Graggen MN 1996. Evaluation of bioaccumulation factors in regulating metals. *Environmental Science and Technology* 30, (10), 448A–452A.
- Chen HC 1985. Water quality criteria for farming the grass shrimp, *Penaeus monodon*. In *Proceedings of the First International Conference on the Culture of Penaeid Prawns/Shrimps*, eds Y Taki, JH Primavera & JA Llobrera, 4–7 December 1984, Aquaculture Department, Southeast Asian Fisheries Development Centre, Iloilo City, Philippines.
- Chen JC, Ting YY, Lin H & Lian TC 1985. Heavy metal concentrations in sea water from grass prawn hatcheries and the coast of Taiwan. *Journal of the World Mariculture Society* 16, 316–332.

- Chien Y 1992. Water quality requirements and management for marine shrimp culture. In *Proceedings of the Special Session on Shrimp Farming*, ed J Wyban, World Aquaculture Society, Baton Rouge, 144–154.
- Chin TS & Chen JC 1987. Acute toxicity of ammonia to larvae of the tiger prawn, *Penaeus monodon*. *Aquaculture* 66, 247–253.
- Coche AG 1981. *Report of the symposium on new developments in the utilization of heated effluents and of recirculation systems for intensive aquaculture*. Stavanger 29–30 May 1980, EIFAC technical paper no 39, Food and Agriculture Organization of the United Nations, Rome.
- Colt J & Armstrong D 1979. *Nitrogen toxicity to fish, crustaceans and molluscs*. Department of Civil Engineering, University of California, Davis.
- Colt J & Westers H 1982. Production of gas supersaturation by aeration. *Transaction of the American Fisheries Society* 111, 342–360.
- Davies PE, Cook LSJ & Goenarso D 1994. Sublethal responses to pesticides of several species of Australian freshwater fish and crustaceans and rainbow trout. *Environmental Toxicology and Chemistry* 13 (8), 1341–1354.
- De La Bretonne L, Avault JW & Smitherman RO 1969. Effects of soil and water hardness on survival and growth of the red swamp catfish, *Procambarus clarkii*, in plastic pools. *Proceedings of the Southeastern Association of Game and Fish Commissioners* (Columbia, Sth Carolina) 23, 626–33.
- Dojlido J & Best GA 1993. *Chemistry of water and water pollution*. Ellis Harwood Ltd, West Sussex.
- Duchrow RM & Everhart WH 1971. Turbidity measurement. *Transactions of the American Fisheries Society* 100, 682–690.
- Durum WH & Haffty J 1961. *Occurrence of minor elements in water*. US Geological Survey Circular 445, Washington, DC.
- DWAF (Department of Water Affairs and Forestry) 1996. South African water quality guidelines, 2nd edn, vol 4: Agricultural use, freshwater aquaculture, Pretoria.
- EIFAC (European Inland Fisheries Advisory Commission) 1969. Water quality criteria for European freshwater fish: Extreme pH values and inland fisheries. *Water Research* 3, 593–611.
- EIFAC (European Inland Fisheries Advisory Commission) 1984. *Water quality criteria for freshwater fish: nickel*. Technical paper 45, FAO Rome.
- Eisler R 1988a. *Arsenic hazards to fish, wildlife, and invertebrates: A synoptic review*. Biological report 85-1.12, Fish and Wildlife Service, US Department of the Interior, Washington DC.
- Eisler R 1988b. *Lead hazards to fish, wildlife, and invertebrates: A synoptic review*. Biological report 85-1.14, Fish and Wildlife Service, US Department of the Interior, Washington DC.
- Eisler R 1992. *Fenvalerate hazards to fish, wildlife, and invertebrates: A synoptic review*. Biological report 85-1.24, Fish and Wildlife Service, US Department of the Interior, Washington DC.
- Ellis MM 1937. Detection and measurement of stream pollution. *US Bureau of Fisheries Bulletin* 22, 367–437.
- Elston RA 1990. *Mollusc diseases: Guide for the shellfish farmer*. Washington Sea Grant Program, University of Washington Press, Seattle.
- Emerson K, Russo RC, Lund RE & Thurston RV 1975. Aqueous ammonia equilibrium calculations: Effect of pH and temperature. *Journal of the Fisheries Research Board of Canada* 32, 2379–2383.
- European Council Directive 1992. *Food Safety (Live Bivalve Molluscs and Other Shellfish) Regulations 1992*. 91/494/EC.
- European Union (EU) 1979. *Directive on the quality of fresh water needing protection or improvement in order to support fish life*. 79/659/EEC, EU, Brussels.
- Fallu R 1991. *Abalone farming*. Fishing News Books, Oxford.
- FAO/UNDP Regional Seafarming Development and Demonstration Project 1991. *Pearl oyster farming and pearl culture*. Central Marine Fisheries Research Institute, Training manual no 8, Tuticorin, India.
- Fayer R, TK Graczyk, EJ Lewis, JM Trout & CA Farley, 1998. Survival of infectious *Cryptosporidium parvum* oocysts in seawater and eastern oysters (*Crassostrea virginica*) in the Chesapeake Bay. *Applied Environmental Microbiology* 64(3), 1070–4.
- Florence M & Batley G 1988. Chemical speciation and trace element toxicity. *Chemistry in Australia* October, 363–367.
- Furness RW & Rainbow PS 1990. *Heavy metals in the marine environment*. CRC Press, Boca Raton, FL.
- Goyal SM 1984. Viral pollution of the marine environment. *Critical Reviews of Environmental Control* 14 (1), 1–32.
- Goyal SM, WN Adams, ML O'Malley & DW Lear 1984. Human pathogenic viruses at sewage sludge disposal sites in the Middle Atlantic region. *Applied and Environmental Microbiology* 48 (4), 758–763.
- Graig CP 1980. It's always the big ones that should get away. *Journal of the American Medical Association* 244 (3), 272–273.

- Hahn KO 1989. *Handbook of Culture of abalone and other marine gastropods*. CRC Press Inc, Boca Raton.
- Haines TA 1981. Acid precipitation and its consequences for aquatic ecosystems: A review. *Transactions of the American Fisheries Society* 110, 669–707.
- Hallegraef GM 1987. *Red tides in the Australasian region*. CSIRO Marine Laboratories Report 187, CSIRO, Hobart.
- Hallegraef GM 1991. *Aquaculturists' guide to harmful Australian microalgae*. CSIRO, Hobart.
- Handler J 1996a. Effects of algal blooms. In *Fish kills: Causes and investigations in Australia*, ed D O'Sullivan, Sourcebook no 13, Turtle Press, Tasmania, 21–29.
- Handler J 1996b. Diseases as causes of fish kills. In *Fish kills: causes and investigations in Australia*, ed D O'Sullivan, Sourcebook no 13, Turtle Press, Tasmania, 35–40.
- Hefter GT & Longmore A 1984. Direct determination of cyanide in seawater. *International Journal of Environmental Analytical Chemistry* 16, 315–323.
- Hejkal TW & CP Gerba 1981. Uptake and survival of enteric viruses in the blue crab, *Callinectes sapidus*. *Applied and Environmental Microbiology* 41 (1), 207–211.
- Holliman A 1993. The veterinary approach to trout. In *Aquaculture for veterinarians: Fish husbandry and medicine*, ed L Brown, Pergamon Press, Oxford.
- Huguenin JE & Colt J 1989. *Design and operating guide for aquaculture seawater systems*. Elsevier, Amsterdam.
- Huner JV 1994. Freshwater crayfish culture. In *Freshwater crayfish aquaculture in North America, Europe and Australia: Families Astacidae, Cambaridae and Parastacidae*, ed JV Huner. Food Products Press (an imprint of The Haworth Press Inc.), New York, 5–90.
- Hutchinson W, Hart P, Daintith M & Purser J 1992. *Marine finfish culture techniques. Multiskilling in aquaculture: A hands on training workshop*. Key Centre for Teaching and Research in Aquaculture, University of Tasmania at Launceston.
- IAEA 1994. *Handbook of parameter values for the prediction of radionuclide transfer in temperate environments*. Technical Reports Series No 364, Vienna.
- ICRP 1978. *Radionuclide release into the environment: assessment of doses to man*. ICRP Publication 29, Pergamon Press, Oxford.
- IWBDE 1972. *Guidelines for water quality objectives and standards*. Technical Bulletin No 67, Inland Water Branch, Department of Environment, Ottawa, Canada.
- Jackson K & D Ogburn, 1998. FRDC Report 96/355.
- Johnson WW & Finley MT 1980. *Handbook of acute toxicity of chemicals to fish and aquatic invertebrates*. Resource publication no 137, Fisheries and Wildlife Service, US Department of the Interior, Washington, DC.
- Johnstone P 1994. *Algal bloom research in Australia*. Occasional Paper 6, Water Resources Management Committee, ARMCANZ, Canberra.
- Jones C 1990. Water quality management. In *Farming the red-claw freshwater crayfish: Proceedings of the seminar*, eds CC Shelley & MC Pearce, Fishery report no 21, Northern Territory Department of Primary Industry and Fisheries, Darwin.
- Kator H & Rhodes MW 1991. Indicators and alternate indicators of growing water quality. In *Microbiology of Marine Food Products*, eds DR. Ward & CR Hackney, Van Nostrand Reinhold, New York, 135–196.
- Kils V 1977. The salinity effect on aeration in mariculture. *Meeresforsch* 25, 210–216.
- Klontz GW 1993. Environmental requirements and environmental diseases of salmonids. In *Fish medicine*, ed MK Stoskopf, WB Saunders Company, Philadelphia, 333–342.
- Kulle K 1971. Salinity. General introduction. In *Marine Ecology 1*, ed O Kinne, Wiley-Interscience, London.
- Langdon JS 1988. Investigation of fish kills. In *Fish diseases: Proceedings 106*, Post Graduate Committee in Veterinary Science University of Sydney, 167–223.
- Lannan JE, Smitherman RO & Tchobanoglous G 1986. *Principals of pond aquaculture*. Oregon State University Press, Corvallis, Oregon.
- Lawson TB 1995. Water quality and environmental requirements, Chapter 2. Fundamentals of Aquacultural Engineering, Chapman & Hall, New York, 12–39.
- Lee D O'C & Wickins JF 1992. *Crustacean farming*. Blackwell Scientific Publications, Oxford.
- Lightner DV (ed) 1996. *A handbook of shrimp pathology and diagnostic procedures for diseases of cultured penaeid shrimp*. World Aquaculture Society, Baton Rouge.
- Linco SJ & Grohmann GS 1980. The Darwin outbreak of oyster-associated viral gastroenteritis. *Medical Journal of Australia* 1, 211–213.
- Lloyd R 1992. Protection of freshwater fish. In *Pollution and freshwater fish*. Fishing News Books, Oxford, 122–161.
- Mance G 1987. *Pollution threat of heavy metals in aquatic environments*. Pollution Monitoring Series, Elsevier Applied Science, London.

- Mance GA, O'Donnell AR, Campbell JA & Gunn AM 1988. *Proposed environmental quality standards for list II substances in water: Inorganic tin*. ESSL TR 254. Water Research Centre, Medmenham, UK.
- Maryland DoE (Department of the Environment) 1993. *Code of Maryland Regulations: Water quality*. 26.08.02, Annapolis, Md.
- MBMB 1996. *National marine biotoxin management plan*. Marine Biotoxin Management Board, Wellington, New Zealand.
- McKee JE & Wolf HW (eds) 1963. *Water quality criteria*. 2nd edn, State of California State Water Quality Control Board, Publication 3-A, Sacramento.
- Meade IW 1989. *Aquaculture management*. Van Nostrand Reinhold, New York.
- Meylan WM, Howard PH, Boethling RS, Aronson D, Printup H & Gouchie S 1999. Improved method for estimating bioconcentration/bioaccumulation factor from octanol/water partition coefficient. *Environmental Toxicology & Chemistry* 18(4), 664–672.
- Mills BJ & Geddes MC 1980. Salinity tolerance and osmoregulation of the Australian freshwater crayfish *Cherax destructor* Clark (Decapoda:Parastacidae). *Australian Journal of Marine and Freshwater Research* 31 (5), 667–676.
- Moore J & Ramamoorthy S 1984. *Heavy metals in natural waters*. Springer-Verlag, Berlin.
- Morrissy NM 1976. Aquaculture of marrion, *Cherax tenuimanus* (Smith). Part 1. Site selection and the potential of marrion for aquaculture. *Fisheries Research Bulletin of Western Australia* (17), 1–27.
- Muir JF 1982. Recirculating systems in aquaculture. In *Recent advances in aquaculture*, eds JF Muir & RT Roberts, Croom Helm, London, 357–446.
- Murphy AM, Grohmann GS, Christopher PJ, Lopez WA, Davey GR & Millsom RH 1979. An Australia-wide outbreak of gastroenteritis from oysters caused by Norwalk virus. *Medical Journal of Australia* 2, 329–333.
- Namaguchi K 1994. Studies of the feeding ecology and food environment of the Japanese pearl oyster *Pinctada fucata martensii*. Ph D thesis, Nagasaki University, Japan.
- NAS/NAE 1973. *Committee of water quality. Water quality criteria 1972*. Publication No 3A, Environmental Studies Board, State Water Quality Control Board.
- National Shellfish Sanitation Program (NSSP) 1990a. *Manual of Operations, Part 1: Sanitation of Shellfish-Growing Areas*. Public Health Service, US Food and Drug Administration, Washington DC.
- National Shellfish Sanitation Program (NSSP) 1990b. *Manual of Operations, Part 2: Sanitation of Harvesting, Processing and Distribution of Shellfish*. Public Health Service, US Food and Drug Administration, Washington DC.
- National Shellfish Sanitation Program (NSSP) 1995a. *Manual of Operations, Part 1: Sanitation of Shellfish-Growing Areas*. US Department of Health and Human Services Public Health Service, US Food and Drug Administration, Washington D.C.
- National Shellfish Sanitation Program (NSSP) 1995b. *Manual of Operations, Part 2: Sanitation of Harvesting, Processing and Distribution of Shellfish*. US Department of Health and Human Services Public Health Service, US Food and Drug Administration, Washington D.C.
- NCRP 1984. *Radiological assessment: predicting the transport, bioaccumulation, and uptake by man of radionuclides released to the environment*. National Council on Radiation Protection and Measurements, Bethesda, MD.
- Nebeker AV & Brett JR 1976. Effects of air-supersaturated water on survival of Pacific salmon and steelhead smolts. *Transactions of the American Fisheries Society* 105, 338–342.
- Nell JA & Chvojka R 1992. The effect of bis-tributyltin oxide (TBTO) and copper on the growth of juvenile Sydney rock oysters *Saccostrea commercialis* (Iredale and Roughley) and Pacific oysters *Crassostrea gigas* Thunberg. *Science of the Total Environment* 125, 193–201.
- Nell JA & Holliday JE 1988. Effects of salinity on the growth and survival of Sydney rock oyster (*Saccostrea commercialis*) and Pacific oyster (*Crassostrea gigas*) larvae and spat. *Aquaculture* 68, 39–44.
- Nell JA & Livanos G 1988. Effects of fluoride concentration in seawater on growth and fluoride accumulation by Sydney rock oyster (*Saccostrea commercialis*) and flat oyster (*Ostrea angasi*) spat. *Water Research* 22 (6), 749–753.
- Nowak B 1996. Environmental factors causing fish kills. In *Fish kills: Causes and investigations in Australia*, ed D O'Sullivan, Sourcebook 13, Turtle Press, Tasmania, 13–19.
- Nowak B & Duda S 1996. *Effects of exposure to sublethal levels of copper on growth and health of sea farmed rainbow trout*. Mount Lyell Remediation Research and Demonstration Program. Supervising Scientist Report 117, Supervising Scientist, Canberra.
- NSSP Manual of Operations 1989. Part 1, Section C. United States Food and Drug Administration, Shellfish Sanitation Branch, Washington, DC.
- O'Sullivan D 1992. Freshwater crayfish farms: Site selection. *Austasia Aquaculture* 6 (5), 16–20.

- O'Sullivan D & Roberts N 1999. *Status of Australian aquaculture in 1997/98*. Austasia Aquaculture Trade Directory 1999, Turtle Press, Hobart, Tasmania, 14–28.
- Ogburn DM 1996. Site selection for cage culture of marine fish in NSW. In *NFRI Marine Finfish Farming: Proceeding of a Workshop*, ed N Quartararo. NSW Fisheries, Cronulla, NSW.
- Pankhurst NW, Boyden CR & Wilson JB 1980. The effect of a fluoride effluent on marine organisms. *Environmental Pollution Services A* 23, 299–312.
- PGVSUS 1988. *Fish diseases*. Proceedings 106, Post Graduate Committee in Veterinary Science University of Sydney.
- PGVSUS 1992. *Finfish Workshop*. Proceedings 182, Post Graduate Committee in Veterinary Science University of Sydney.
- PGVSUS 1996. *Fish diseases*. Proceedings 265, Post Graduate Committee in Veterinary Science University of Sydney.
- Phillips JH 1993. Developing country aquaculture, trace metal contaminants, and public health concerns. In *Wastewater-fed Aquaculture: Proceedings of the International Seminar on Wastewater Reclamation and Reuse for Aquaculture, Calcutta, India*, eds P Edward & RSV Pullin, Asian Institute of Technology, Bangkok, Thailand.
- Pillay TVR 1990. *Aquaculture principals and practices*. Fishing News Books Ltd, Oxford.
- Post G 1987. *Text book of fish health*. rev edn, TFH Publications, New Texas, 250–285.
- Poxton MG & Allhouse SB 1982. Water quality criteria for marine fisheries. *Aquacultural Engineering*, 1, 153–191.
- Purser J 1996a. Oxygenation and salmonid production. Salmon Speak. *Austasia Aquaculture* 10 (3), 71–73.
- Purser J 1996b. Aeration and oxygenation. Salmon Speak. *Austasia Aquaculture* 10 (4), 62–64.
- Richards GP 1999. Limitations of molecular biological techniques for assessing the virological safety of foods. *Journal of Food Protection* 62 (6), 691–697.
- Rimmer M 1995. *Barramundi farming: An introduction*. Queensland Department of Primary Industries, Brisbane.
- Romaire RP 1985. *Water quality, crustacean and mollusk aquaculture in the United States*. AVI Publishing, Westport.
- Rowland SJ 1986. Site selection, design and operation of aquaculture farms, In *Freshwater aquaculture in Australia*, eds P Owen & J Bowden, Rural Press, Queensland, 11–22.
- Rowland SJ 1995a. Water quality in the intensive pond culture of silver perch. In *Silver perch culture: Proceedings of silver perch aquaculture workshops*, eds SJ Rowland & C Bryant, Grafton and Narrandera, April 1994, Austasia Aquaculture for NSW Fisheries, 51–55.
- Rowland SJ 1995b. Off-flavour: a potential problem for the silver perch industry. In *Silver perch culture: Proceedings of silver perch aquaculture workshops*, eds SJ Rowland & C Bryant, Grafton and Narrandera, April 1994, Austasia Aquaculture for NSW Fisheries, 51–55.
- Sawyer CN & McCarty PL 1978. *Chemistry for environmental engineers*. McGraw-Hill, New York.
- Schlotfeldt HJ & Alderman DJ 1995. *What should I do? A practical guide for the fresh water fish farmer*. European Association of Fish Pathologists/Warwick Press, Weymouth.
- Schmidt U & Huber E 1976. Methylation of organo lead and lead (II) compounds to (CH<sub>3</sub>)<sub>4</sub> Pb by microorganisms. *Nature* 259, 157–158.
- Schreck CB & Li HW 1991. Performance capacity of fish: Stress and water quality. In *Aquaculture and water quality*, eds DE Brune & JR Tomasso, World Aquaculture Society, Baton Rouge, 21–29.
- Schreckenbach K 1982. Die bedeutung von umweltfaktoren bei der fischproduktion in Binnengewasser. Monatshefte fuer Veterinaermedizin, 37, 220–230.
- Schwedler TE, Tucker CS & Bealeu MH 1985. Noninfectious diseases. In *Channel catfish culture*, ed CS Tucker, Elsevier, New York 497–541.
- SECL 1983. *Summary of water quality criteria for salmonid hatcheries*. rev edn, Sigma Environmental Consultants Ltd, for Department of Fisheries and Oceans, Canada.
- Seed R & Suchanek TH 1992. Population and community ecology of Mytilus. In *The mussel Mytilus: Ecology, physiology, genetics and culture. Developments in aquaculture and fisheries science* 25, ed E Gosling, Elsevier Science Publishers, Amsterdam.
- Shepherd CJ & Bromage NR (eds) 1988. *Intensive fish farming*. BSP Professional Books, London.
- Sindermann CJ 1990. *Principal diseases of marine fish and shellfish*. 2 vols, 2nd edn, Academic Press Ltd, San Diego.
- Smith PT 1996. Physical and chemical characteristics of sediments from prawn farms and mangrove habitats on the Clarence River, Australia. *Aquaculture* 146, 47–83.
- Stelma GN & McCabe LJ 1992. Nonpoint pollution from animal sources and shellfish sanitation. *Journal of Food Protection* 55(8), 649–656.
- Strickland JDH & Parsons TR 1968. *A practical handbook of seawater analysis*. Fisheries Research Board of Canada Bulletin 167, Ottawa.

- Stumm W & Morgan JJ 1996. *Aquatic chemistry*. 3rd edn, John Wiley and Sons, New York.
- Su H-M, Liao I-C & Chiang Y-M 1991 Mass mortality of prawn caused by *Alexandrium tamarense* blooming in a culture pond in southern Taiwan. In: *Toxic phytoplankton blooms in the sea*, vol 3, ed TJ Smayda, Elsevier, Amsterdam, 329–334.
- Svobodova Z, Lloyd R, Machova J & Vykusova B 1993. *Water quality and fish health*. EIFAC technical paper no 54, FAO, Rome.
- Swingle HS 1969. *Methods of analysis for waters, organic matter and pond bottom soils used in fisheries research*. Auburn University, Alabama.
- Taeye M 1982. Brutfrühsterben bei Karpfen (*Cyprinus carpio*) nach industriemässiger Erbrütung und ihre Ursachen. III. Der Einfluss des Kohlendioxid-Gehaltes des Wassers auf die Lebensfähigkeit von Karpfenbrut und den physiologischen Zustand von Karpfen. *Zeitschrift für die Binnenfischerei der DDR* 29, 18–24.
- Takashi I & Yoshihiro S 1975. Productivity of communities in fish culturing ponds. In *Productivity of communities in Japanese waters*, eds S Mori & G Yamamoto, Japanese Committee for the International Biological Program, vol 10, University of Tokyo Press, Tokyo, 247–286.
- Tebbutt THY 1977. *Principles of water quality control*. Pergamon Press, Oxford.
- Tomasso JR 1993. Environmental requirements and diseases of temperate freshwater and estuarine fishes. In *Fish medicine*, ed MK Stoskopf, WB Saunders Company, Philadelphia, 240–246.
- Tomasso JR, Wright MI, Simco BA & Davis KB 1980. Introduction of nitrite-induced toxicity in channel catfish by calcium chloride and sodium chloride. *Prog. Fish-Cult.*, 42, 144–146.
- Tompkins JA & Tsai C 1976. Survival time and lethal exposure time for the Blacknose Dace exposed to free chlorine and chloramines. *Transactions of the American Fisheries Society* 105, 313–321.
- Tosteson TR, DL Ballantine & HD Durst 1988. Seasonal frequency of ciguatoxic barracuda in Southwest Puerto Rico. *Toxicon* 26 (9), 795–801.
- Tucker CS & Robinson EH 1990. *Channel catfish farming handbook*. Van Nostrand Reinhold, New York.
- University of California, Davis 1997. Web site of the University of California Davis ([www-seafood.ucdavis.edu/Pubs/safety1.htm](http://www-seafood.ucdavis.edu/Pubs/safety1.htm) and [www-seafood.ucdavis.edu/haccp/compendium/chemical/natural.htm](http://www-seafood.ucdavis.edu/haccp/compendium/chemical/natural.htm)).
- USEPA (US Environmental Protection Agency) 1993. *Code of federal regulations. Part 131: Water quality standards. Protection of environment. Parts 100-49*. U.S. Government Printing Office, Washington, DC.
- USEPA (US Environmental Protection Agency) 1995. *Aquatic toxicity information retrieval AQUIRE database*. United States Environmental Protection Agency, Duluth, MN.
- Wajsbrot N, Gasith A, Diamant A & Popper DM 1993. Chronic toxicity of ammonia to juvenile gilthead seabream *Sparus aurata* and related histopathological effects. *Journal of Fish Biology* 42 (3), 321–328.
- Walker SL & Gobas FAPC 1999. An investigation of the application of the Canadian water quality guidelines. *Environmental Toxicology and Chemistry* 18(6), 1323–1328.
- Walker T 1994. Pond water quality. In *Aquaculture sourcebook No 8*, ed D O'Sullivan, Turtle Press, Tasmania, 21–29.
- WHO (World Health Organization) 1989. *Health guidelines for the use of wastewater in agriculture and aquaculture*. Technical Report Series no. 776, Geneva.
- Wolf K 1988. *Fish viruses and fish viral diseases*. Cornell University Press, Ithaca.
- Yasumoto T 1985. Recent progress in the chemistry of dinoflagellate toxins. In *Toxic Dinoflagellates, Proceedings of the Third International Conference*, eds Anderson DM, White AW & Baden DG, Elsevier/North Holland, New York, 259–270.
- Zweig RD, Morton JD & Stewart MM, 1999. *Source water quality for aquaculture: a guide for assessment*. The World bank, Washington DC.