
R E F E R E N C E S

- Alva A.K., Larsen S. and Bille S.W. (1980). The influence of rhizosphere in rice crop on resin extractable phosphate in flooded soils at various levels of phosphate application. *Plant Soil.* 56 : 17-33.
- Arisz W.H. (1956). Significance of the symplast theory for transport in the root. *Protoplasma.* 46, 5-62.
- Armstrong W. (1979). Aeration in higher plants. *Adv. Bot. Res.* 7 : 225-232.
- Armstrong W. and Read D.J. (1972). Some observations on oxygen transport in conifer seedling. *New Phytol.* 71, 55-62.
- Atkinson M.R., Findlay G.P., A.B. Pitman, M.G. Saddler, H.D.W. and West K.R. (1967). Salt regulation in the mangroves Rhizophora mucronata Lam. and Aegialitis annulata R.Br. *Aust.J. Biol.Sci.*, 20, 1069-1086.
- Avadhani P.N., Greenway H., Lefroy R. and Prior L. (1978). Alcoholic fermentation and malate metabolism in rice germinating at low oxygen con. *Aust. J. Plant Physiol.* 5, 15-25.
- Ball A.R. and Dutt S.K. (1987). Salt tolerance mechanism in Acanthus ilicifolius L. *Ind. J. Plant Physiol.* 30(2), 170-175.
- Barnabas A.D., Buter V. and Steinke T.D. (1980). Fine structure of the cavities in the wall of leaf blade epidermal cells. *Z.Pflanphysiol.* 99 (2) : 95-104.
- Baumeister, Walter and Guenter Ziffus (1981). Salt secretion by salt glands of Armeria maritima. *Z. Pflanzenphysiol.* 102(3) : 273-278.
- Beals C.C. (1917). The effect of aeration on the roots of Zea mays L. *Proc. Indiana Acad. Sci.* 7, 77-180.

- Binzel Marla L., F. Dana Hess, Ray A. Bressan and Paul M. Hasegawa (1988). Intra cellular compartmentation of ions in salt adapted tobacco cells. *Plant. Physiol. (Bethseda)* 86(2) : 607-614.
- Blazquez R. (1985). Influence of the content and characteristics of soil salts on the exudation process in Limonium delicatulum. *An Inst. Nac. Invest. Agrar. Ser. Agric.* 28(3) : 69-102.
- Bosabalidis A.M. and W.W. Thomson (1985). Ultra structural development and secretion in the salt gland of Tamarix aphylla. *J. ultrastar. Res.* 92 (1/2), 55-62.
- Bosabalidis A.M. and Thomson W.W. (1984). Ultrastructural differentiation of an unusual structure lining the anticlinal walls of inner secretary cells in Tamarix aphylla. *Bot.Gaz.* 145(4) : 427-435.
- Bosabalidis A.M. and Thomson W.W. (1984). Light microscopical studies on salt gland development in Tamarix aphylla. *Ann. Bot. (Lond.)* 54(2) : 169-174.
- Broadfoot W.M. and Williston H.L. (1973). Flooding effects on southern forests. *J. For.* 71, 584-587.
- Bradford K.J. and Yana S.F. (1981). Physiological response of plants to water logging. *Hort. Science Special Insert.* 16, 25-30.
- Chapman V.J. (1940a) : Studies on salt marsh ecology section VI-VII. Comparison with marshes on east-coast of North America. *J.Eco.* 28 : 118-152.
- Chikrova T.V. (1978). Some regulatory mechanisms of plant adaptation to temporal anarcrobioses. pp. 137-154. *Ann. Arbor. Sci. Publ.*, Ann Arbor. Michigan.

Chirkova T.V. and Gutman T.S. (1972). Physiological role of branch lenticels
in willow and poplar under conditions of root anaerobiosis.

Sov. Plant Physiol. (Eng. Transl.) 19 : 289-295.

Coutts M.P. and Philipson J.J. (1978a). Tolerance of tree roots to water-
logging its adaptation of sitka spruce and lodgepole pine.

New Phytol. 80 : 63-69.

Crocker and Davies (1914). C.F. Text book "Flooding and Plant Growth"
edited by Kozlowski T.T. (1984).

Dan J., Koyumdjisky H. and Vaalon D.H. (1962). Principles of proposed
classification for the salt of Israel. Trans. Intern. Soil Conf.
Sect. IV and V, pp. 1-337.

Davies D.D. (1980). Anaerobic metabolism and production of organic acid.
In "Biochemistry of plants (D.D.Davies ed.) vol.2, pp.581-611,
Academic Press, New York.

DeBell D.S. and Naylor A.W. (1972). Some factors affecting germination
of swamp tulepu seeds. Ecology. 53 : 504-506.

de Sigmund A.A.J. (1938). The principles of soil science, 362 pp. T.Murby,
London. CF. Waisel Y. (1972). Biology of Halophytes. Pb.

de Sigmund A.A. (1927). The classification of alkali and salty soils.
Proc. 1st Intern. Congr. Soil Sci. 1, 330-334.

Decker J.P. (1961). Salt secretion by Tamarix pentandra Pall. Forest Sci.,7:
214-217.

De Vecchi and Gerolia F.M. (1984). Cytochemical and ultra structural obser-
vations on Chenopodium amaranticolor hair, supplied with low
high sodium chloride molarity. Caryologia: 37(1/2) 147-160.

Drennan Philippa M. and Patricia Berjak (1982). Degeneration of the salt glands accompanying foliar maturation in Avicennia marina.

New Phytol. 90(1) : 165-176.

Drennan Philippa and Dammenter N.W. (1982). Physiology of salt secretion in the mangrove Avicennia marina. New Phytol. 91(4) : 597-606.

Drennan Philippa M., Patricia Berjak, June R. Lawton and Pammentern W. (1987). Ultra structure of salt gland of Avicennia marima. Plant (Berl.) 172(2) : 176-183.

Dregne H.E. (1968). Surface materials of desert environment. In "Deserts of the world" pp. 287-377. Univ. Arizona Press, Tucson, Arizona.

Drew M.C. and Lynch J.M. (1980). Soil anaerobiosis, micro-organisms and root function. Annu. Rev. Phytopathol. 18 : 37-66.

Drew M.C., Jackson M.B. and Giffard S.C. (1979). Ethylene-promoted adventitious rooting and development of cortical air spaces (aerenchyma) in roots may be adaptive responses to flooding in Zea mays L. Planta 147 : 83-88.

Du Barry A.D. (1963). Germination of bottomland tree seeds while immersed in water. J. For. 61 : 225-266.

Edwards T.I. (1933). The germination and growth of Peltandra virginica in absence of oxygen. Bull. Torrey Bot. Club 60 : 573-581.

Effer W.R. and Ranson S.L. (1967). Respiratory mechanism in buckwheat seedling. Plant Physiol. 42, 1042-1052.

Etherington J.R. (1983). Wet land ecology, Pb. A.H. London No.4.

Faraday Christopher D. and Thomson W.W. (1986). Structural aspects of salt glands of the plumbaginaceae . J.Exp.Bot. 37(177) : 461-470.

Faraday Christopher D. and Thomson W.W. (1986). Morphometric analysis of Limonium salt glands in relation to ion efflux. J. Exp. Bot., 37(177) : 471-481.

Faraday Christopher D. and Thomson W.W. (1986). Functional aspects of salt glands of plumbaginaceae. J. Exp. Bot. 37 (181): 1129-1135.

Faradar Christopher D., Paul M. Quinton and Thomson W.W. (1986). Ion fluxes across the transfusion zone of secretion Limonium Salt glands. J. Expt. Bot. 37 (177) 482-494.

Fahn A. (1967). Plant anatomy Pb. Pergamon Press Lond. Newyork.

Frey Wyssling (1935). C.F. Waisel Y. 1972. Physiological Ecology.

Gill C.J. (1975). The ecological significance of adventitious rooting as a response to flooding in woody species with special reference to Alnus glutinosa (L.) Gaertn. Flora. 164 : 85-97.

Greenway H., Hughes P.G. and Thomas D.A. Plant response to saline substrates VIII Regulation of ion conc. on in salt sensitive and halophytic species. Aust. J. Biol. Sci. 19 : 741-756.

Greenwood D.J. and D. Goodman (1971). Studies on supply of oxygen to the roots of mustard seedlings. New Phytol. 70 : 85-96.

Healy M.T. and W. Armstrong (1972). The effectiveness of internal oxygen transport in a mesophyte (Pisum sativum L.) Planta 103: 302-309.

Hegde B.A. (1989). Photosynthesis and productivity of crop plants under stress condition (Final Technical Report of the PL 480 Project No. IN-ARS-102, Shivaji Univ. Kolhapur.

Higlano E.W. (1906). Soils, their formation, properties, composition and relation to climate and plant growth' 593 pp. McGraw-Hill, New York.

Hoftmann P. and Splinter W.E. (1967). Salicornia brachystachya. Ges. 80, 437-446. C.F. Waisel Y. Physiological Ecology, 1972.

Hoagland D.R. (1948). Lecture on the Inorganic Nutrition of Plants. Chronica Botanica Waltham Massachusetts.

Hook D.D., Brown C.L. and Kormanik P.P. (1970a). Lenticel and water root development of swamp tupelo under various flooding conditions. Bot. Gaz. (Chicago) 131, 217-224.

Hook D.D. and Brown C.L. (1973). Root adaptations and relative flood tolerance of five hardwood species. For. Sci., 19, 225-229.

Hook D.D., Brown C.L. and Kormanik P.P. (1971). Inductive flood tolerance in swamp tupelo. J. Expt. Bot., 22 : 78-89.

Hooker Vol.IV. Phyla nodiflora (L.) Loureiro Greene, Pittonia 4:46.1899, Sant, Fl. Khandala ed. 3, 211, 1967 Verbena nodiflora L., Sp. Pl.20-1753 Lippia nodiflora(L) Michaux Fl.Bor. Amer. 2: 15. 1803, Wight Ic. t-1463-1849, Gamble, Fl. Madras 1088 (762) 1924. Adams, Fl.Pl. Jamaica 630, 1972.

Horton R.F. and D.J. Osborne (1967). Senescence abscission and cellulase activity in Phaseolus vulgaris. Nature (London) 214: 1086-1088.

Hosner J.F. and Boyce S.G. (1962). Tolerance to water saturated soil of various bottomland hardwoods. For. Sci. 8, 180-186.

Jackson W.T. (1955). The role of adventitious roots in recovery of shoots following flooding of original root system. Am.J. Bot. 42, 816-819

Joffe J.S. (1949). "The ABC of Soil" Pedology Publ. New Brunswick, New Jersey.

Joshi G.V. (1976). Studies in photosynthesis under saline conditions. Pl.480 Proj. Report, Shivaji Univ. Kolhapur.

Joshi Y.L., Dwivedi R.S., Bal A.R. and Quadar Ali (1983). Salt excretion by glands in Diplachne fusca. Ind. J. Plant Physiol. 26(2): 203-208.

Karadge B.A., Danwade N.L. and Chavan P.D. (1983). Physiological studies in salt tolerance in Lippia nodiflora Michaux 1. growth mineral nutrition and organic constituents. Biovigyanam, 9 : 47-58.

Kawase M. (1981). Anatomical and morphological adaptations of plants to waterlogging. Hort. Science Special Insert. 16 : 30-34.

Kawase M. (1974). Role of ethylene in induction of flooding damage in sunflower. Physiol. Plant. 31 : 29-38.

Kawase M. (1976). Ethelene accumulation in flooded plant. Physiol. Plant. 36 : 236-241.

Kawase M. (1978). Anaerobic elevation of ethylene conc. in water logged plants. Amer. J. Bot., 65 : 736-740.

Keraner T.H. and Schofield C.S. (1936). The choice of crops for saline land. U.S. Dept. Agr. Cir. 404 : 24 pp.

Kelley W.P. (1951). Alkali soils, their formation, properties and reclamation. Reinhold, New York.

Kordon H.A. (1974). Patterns of shoot and root growth in rice seedling germinating under water. *J. Appl. Ecol.* 11, 685-690.

Kozlowski T.T. (1982). Water supply and Tree growth II. Flooding For. Abstr. 43 : 145-161.

Keeley J.E. (1979). Population differentiation along a flood frequency gradient : Physiological adaptation to flooding in Nyssa sylvatica. *Ecol. Monon.* 49 : 89-108.

Kovda V.A. Die Typen der Alkaliboden (Solontz) Proc. 3rd Intern. Congs. Soil. Sci. 3 : 99-102.

Kramer P.J., Riley W.S. and Bannister T.T. (1952). Gas exchange of cypress knees. *J. Ecol.* 33 : 117-121.

Kramer P.J. and Kozlowski T.T. (1979). Physiology of woody plants. Academic Press, New York.

Lapin L.P., Sogolova T.V. and Stroganov B.P. (1980). Localization of Chloride in glycophytes and halophytes grown under high salinity. *Fizot. rast. (Mosc.)* 27(2) : 278-286.

Luttge U. (1966). Funktion und struktur pflanzlicher Drusen, Natur wissen schften. 55 : 96-103.

Mallery Charles H. and Howard J.T. (1984). The mineral ion relations of mangroves I. root cell compartments in a salt excluder and salt secretary species at low salinities. *Plant Cell. Physiol.* 125(1) : 1123-1132.

Maathuis Frans J.M. and Hidde B.A. Princ. (1990). Patch Clamp studies on root cell vacuoles of a salt tolerant and salt sensitive Plantago sps. *Pl. Physiol. (Bethesda)* 92(1) : 23-28.

McPherson D.C. (1939) Cortical air spaces in roots of Zea mays L.

New Phytol. 18 : 190-202.

Marloths (1888). Cf. Waisel Y. (1972). Biology of Halophyte Pb.

Mendelsohn I.A., McKee K.L. and Patrick W.H. Jr. (1981). Oxygen deficiency in Spartina alterniflora roots, metabolic adaptations to anoxia. Science (Washington) D.C. 214 : 439-441.

Nagai (1916). C.F. Text book "Flooding and Plant Growth" edited by Kozlowaski T.T. (1984).

Olesen Peter (1979). Ultrastructural observations on the cuticular envelope in salt glands of Frankenia pauciflora Protoplasma. 99(1/2): 1-10.

Oross John W., Robert T. Leonard and Thomson W.W. (1985). Flux rate and secretion model for salt glands of grasses. Isr. J.Bot. 34(2-4), 69-78.

Oross John W. and Thomson W.W. (1984). The ultrastructure of Cynodon dactylon salt glands secreting and nonsecreting. Eur. J. Cell. Biol. 34(2) : 287-291.

Oross John W. and Thomson W.W. (1982). The ultrastructure of Cynodon dactylon salt glands the apoplast. Eu.J.Cell. Biol. 28(2): 257-263.

Oross J.W. and Thomson W.W. (1982). The ultrastructure of salt glands of Cynodon and Distichlis (Poaceas). Am.J.Bot. 69 (6) : 939-949.

Penfound W.T. (1934). Comparative structure of the wood in the 'knees' swollen bases, and normal trunks of the tupelogum Nyssa aquatical.) Am. J. Bot. 21 : 623-631.

Philips I.D.J. (1964). Root shoot hormone relations-II. Changes in endogenous auxin concentration produced by flood the root system in

Helianthus annus. Ann. Bot. (London) 23 : 37-45.

Pollak G. and Waisel Y. (1970). Salt secretion in Aeluropus littoralis (Willd) Parl. Ann. Bot. (London) 34 : 879-888.

Pradet A. and Bomsel J.L. (1978). Energy metabolism in plants under hypoxia and anoxia. In 'Plant life in anaerobic Environments' pp.89-118. Ann. Arbor. Sci. Publ., Ann. Arbor. Michigan.

Richards L.A. (1954). Diagnosis and improvement of saline and alkali soils. U.S. Dept. Agr. Handb. No. 60.

Ridge I. and D.J. Osborne (1969). Cell growth and cellulase regulation by ethylene and Indole-3 acetic acid in shoots of Pisum sativum. Nature (London) 223 : 310-319.

Rowe R.N. (1966). Anaerobic metabolism and cyanogenic glycoside hydrolysis in differential sensitivity of peach, plum and peer roots in water saturated condition. Ph.D. Thesis, Univ. of California, Davis.

Rozema J., Arp W., Diggelen J.V. and Letschert J. (1987). An ecophysiological comparison of measurements of the diurnal rytham of leaf elongation and changes of leaf thickness of salt resistant Dicot and Monocot. Exp. Bot., 38 :(188) : 442-452.

Rozema J., Gude N. and Pollak Gad (1981). An ecophysiological study of salt secretion of 4 halophytes. New Phytol. 89(2) : 201-218.

Ruhland W. (1915). C.F. Waisel Y. "Biology of halophytes" (1972) Pb. Ap.

- Sasaki T. (1930). C.F. Kozlowski, T.T. (Ed.) 1984, "Flooding and plant growth"
- Scholander P.F., Hammel H.T., Hemmingsen E. and Garey W. (1962). Salt balance in Mangroves. *Plant Physiol.* 37, 722-729.
- Scholten (1978). C.F. Texbook "Flooding and plant growth" edited by Kozlowski T.T. Pub. 1987.
- Stelzer R. and Lauchli A. (1980). Salt tolerance and flooding tolerance of Puccinellia Peisonis. *Z. Pflanzen Physiol.* 97(2) : 171-178.
- Stepanova A.A. (1983) : Ultrastructural modification of salt glands in Limonium (Plumbaginaceu) *Bot. Zh. (Lennigr.)* 68(8) : 1003-1012.
- Singh H.K. Lippia nodiflora Rich in Michx Bor-Amer ii 15, Phyla chinensis Lour-Fi-Cochinch 66 Flora of Hassan District Karnataka.
- Skelding A.D. and Winterbotham J. (1939). The structure and development of hydathodes of Spartina townsendii GROVES, *New Phytol.* 38 : 69-79.
- Stocker O. (1933). C.F. Waisel Y. (1972). Biology of Halophytes. Pb. Ap.
- Taleisnik Edith L. and Ana M. Anton (1988). Salt glands in poppophorum (Poaceal) *Ann. Bot. (Lond.)* 62(4), 383-388.
- Teal J.M. and Kanwisher W. (1966). Gas transport in marsh grass Spartina alternifolia. *J. Exp. Bot.* 355-361.
- Thomson W.W. and Kathryn P.A. (1985). The ultrastructure of plasmodesmata of the salt glands of Tamarix aphylla. *Protoplasma.* 125(1/2) : 13-23.
- Van Raalte M.H. (1940). On the oxygen supply of rice roots. *Ann. Bot. Buitenzorg,* 50 : 99-113.

- Vartapetian B.B. (1978). Life without oxygen. In "Plant life in Anaerobic Environment" pp. 1-11, Ann. Arbor Sci. Publ., Ann Arbor, Michigan
- Waisel Y. and Rechav Y. (1972). Ecotypic differentiation in *Phragmites Communis* Trin. *Hydrobiologia*, in press.
- Waldren S., Davis M.S. and Etherington R. (1987). Comparative studies of plant growth and distribution in relation to water logging XI. *New Phytol.* 105 (4) : 551-562.
- Wample R.L. and Reid D.M. (1976). Control of adventitious root production and hypocotyla hypertrophy of sunflower (*Helianthus annus*) in response of flooding. *Physiol. Plant.* 44 : 351-358.
- Wamble R.L. and Reid D.M. (1979). The role of endogenous auxins and ethylene in the formation of adventitious roots and hypocotyl hypertrophy in flooded sunflower plants (*Melianthus annus*). *Physiol. Plant.*, 45 : 219-226.
- Watkins C.B.J., Brown M.A. and Dromgoole F.I. (1988). Salt tolerance of coastal plant *Tetragonia trigyna* Banks et sol. ex hook (Climbing Negeoland Spinach). *N.Z.J.Bot.* 26(1): 153-162.
- Wenkert W., Fausey N.R. and Watters H.D. (1981). Flooding responses in *Zea mays* L. *Plant Soil.* 62 : 351-366.
- Whitford L.A. (1956). A theory on the formation of oypress knees. *J. Elisha Mitchell, Sci. Soc.* 72 : 80-83.
- Wieneke J., J.G.Sarwar and M. Roeb (1987). Existence of salt glands of leaves of Kallar grass (*Leptocloa fusca* L. Kunth). *J.Plant Nutr.* 10(7), 805-820.

William W.T. and Barber D.A. (1961). The functional significance of aerenchyma in plants. Soc. Expt. Biol. Sym. 15 : 132-144.

Zemlianukhin A.A. and Ivanov B.F. (1978). Metabolism of organic acids of plants in the conditions of hypoxia. Ann. Arbor. Sci. Publ., Ann. Arbor. Michigan, pp. 169-202.

Zeroni M., Jerie P.H. and Hall M.A. (1977). Studies on the movement and distribution of ethylene in Vicia faba L. Planta 134, 119-125.

Ziegler Hubert and Ulrich Luttge (1966). The salt glands of Limonium vulgare I. The fine structure. Planta 70(2) : 193-206.

Zhou, Hong-Bin, Jiang, Hu-xiang and Dou Run-Lu (1982). Morphology of salt gland of Spartina anglica. Acta Bot. Sin. 24(2) : 115-119.