

DAFTAR PUSTAKA

- Abdalla, M.M. 2011. Beneficial Effects of Diatomite on Growth, the Biochemical Contents and Polymorphic DNA in *Lupinus albus* Plants Grown Under Water Stress. *Agricultural Biological Journal North America*, 2:207-220.
- Adamiec, P., J.C. Benezet, and A. Benhassaine. 2008. Pozzolanitic reactivity of silico aluminous fly ash. *Particuology* 6: 93-98.
- Agarie, S., H. Uchida, W. Agata, F. Kubota and P.B. Kaufman. 1993. Effect of Silicon on Growth Matter Production and Photosynthesis in Rice Plant (*Oryza Sativa* L). *Crop Production and Improvement Technology*, 34: 225-234.
- Agarie, S., W. Agata, H. Uchida, F. Kubota and P. B. Kaufman. 1996. Function of silica bodies in the epidermal system of rice (*Oryza sativa* L.): testing the window hypothesis. *Journal of Experimental Botany*, 47(298): 655-660.
- Agarie, S., W. Agata, F. Kubota, and P.B. Kaufman. 1998. Physiological Role of Silicon in Photosynthetic and Dry Matter Production in Rice Plant. *Japan Crop Science*, 61: 200-208.
- Ahmad, F., T. Rahmatullah, M.A. Aziz, A. Maqsood, T.M. Mukkram, and S. Kanwal. 2007. Effect of silicon application on wheat (*Triticum aestivum* L.) growth under water deficiency stress. *Emir Journal Food Agricultural*, 19(2): 01-07.
- Ahmad, S.T., and R. Haddad. 2011. Study of Silicon Effects on Antioxidant Enzyme Activities and Osmotic Adjustment of Wheat under Drought Stress. *Czech Journal Genetica Plant Breeding*, 47(1): 17-27.
- Ahmed, M., A. Kamran, M. Asif, U. Qadeer, Z. I. Ahmed, and A. Goyal. 2013. Silicon Priming: a Potential Source to Impart Abiotic Stress Tolerance in Wheat: a Review. *Australian Journal of Crop Science*, 7(4): 484-491.
- Al-Aghabary, K., Z. Zhu, and Q. Shi. 2004. Influence of Silicon Supply on Chlorophyll Content, Chlorophyll Fluorescence and Antioxidative Enzyme Activities in Tomato Plants Under Salt Stress. *Journal of Plant Nutrition*, 27: 2101-2115.
- Ashraf, M. 2009. Biotechnological Approach of Improving Plant Salt Tolerance Using Antioxidants as Markers. *Biotechnology Advances*, 27: 84-93.

- Ashtiani, F.A., J. Kadir, A. Nasehi, S.R.H. Rahaghi, and H. Sajili. 2012. Effect of Silicon on Rice Blast Disease. *Pertanika Journal Tropical Agricultural Science*, 35(S): 1-12.
- Backer, C.A. and R.C. Bakhuizen van den Brink Jr. 1968. *Flora of Java (Spermatophytes Only)*. Vol. III. N.V.P. Nordhof-Goningen, Netherlands.
- Balasimha, D. 1983. Nitrate Reductase Activity during Ontogeny of the Fruit of Cashew (*Anacardium occidentale*). *Australian Journal Plant Physiology*, 10(1): 9-14.
- Baligar, V.C., N.K. Fageria and Z.I. He. 2001. Nutrient use Efficiency in Plants. *Community Soil Science Plant Anal*, 32: 921-950.
- Bates, L.S., R.P. Waldren and I.D. Teare. 1973. Rapid Determination of Free Proline for Water Stress Studies. *Plant and Soil*, (39) : 205-207.
- Belanger, R.R., P.A. Bowen, D.L. Ehret, and J.G. Menzies. 1995. Soluble Silicon: Its Role in Crop and Disease Management of Greenhouse Crops. *Plant Disease*, 79(4): 329-336.
- Borrelli, N., M.F. Honainea, S.M. Altamiranoa, M. Osterrietha. 2011. Calcium and Silica Biomineralizations in Leaves of Eleven Aquatic Species of the Pampean Plain, Argentina. *Aquatic Botany*, 94: 29-36.
- Bargmann, B.O.R., A.M. Laxalt, B. ter Riet, B. van Schooten, E. Merquiol, C. Testerink, M.A. Haring, D. Bartels, and T. Munnik. 2009. Multiple PLDs Required for High Salinity and Water Deficit Tolerance in Plants. *Plant and Cell Physiology*, 50(1): 78-89.
- Bayat, H., M. Alirezaie, H. Neamati, and A.A. Saadabad. 2013. Effect of Silicon on Growth and Ornamental Traits of Salt-stressed Calendula (*Calendula officinalis* L.). *Journal of Ornamental Plants*, 3(4): 207-214.
- Buol, S.W., F.D. Hole, and R.J. Mc Cracken. 1980. *Soil Genesis and Classification*. The IOWA State University Press, Ames.
- Campbell, N.A. and J.B. Reece. 2002. *Biology*. Sixth Edition, Pearson Education. Inc. San Francisco, 802-831.
- Cosgrove, D.J. 2008. *Mechanism of Cell Enlargement-Wall Loosening Protein*. University and State Collage, New York.

- Cottenie, A. 1980. Soil and Plant Testing and Analysis. *FAO Soils Bulletin*, 38(2): 250p.
- Crusciol, C.A.C., A.L. Pulz, L.B. Lemos, R.P. Soratto, and G.P.P. Lima. 2009. Effects of Silicon and Drought Stress on Tuber Yield and Leaf Biochemical Characteristics in Potato. *Crop Science*, 49: 949-954.
- Datnoff, L.E., C.W. Deren, and G.H. Snyder. 1997. Silicon Fertilization for Disease Management of Rice in Florida. *Crop Protection*, 16(6): 525-531.
- De Detta, S.K. 1981. *Principle and Practices of Rice Production*. John Wiley and Sons, New York.
- Departemen Pertanian. 2006. *Beras Merah*. Lembar Informasi Pertanian, Deptan.
- Elawad, S.H. and V.E. Green. 1979. Silicon and the Rice Plant Environment: A Review of Recent Research. *Il Riso*, 28: 235-253.
- Elawad, S.H., J.J. Street and G.J. Gascho. 1982. Response of Sugarcane to Silicate Source and Rate Growth and Yield. *Journal of Agronomy*, 74(3): 481-484.
- Epstein, E. 1994. The Anomaly of Silicon in Plant Biology. *Proceedings of the National Academy of Sciences*, 91(1): 11-17.
- Epstein, E. 1999. Silicon. *Annual Review of Plant Physiology and Plant Molecular Biology*, 50(1): 641-664.
- Fahn, A. 1982. *Plant Anatomy* third edition. Penerjemah: A. Soediarso, R. M. T. Koesoemaningrat, M. Natasaputra, H. Akmal, Editor: S. S. Tjitrosomo. Gadjah Mada University Press. 941 hal.
- Fallah, A. 2000. Effects of Silicon and Nitrogen on Growth, Lodging and Spikelet Filling in Rice (*Oryza sativa* L.). *Thesis*. UPLB.
- Faure, G. 1991. *Principles and Applications of Inorganic Geochemistry*. Macmillan, New York.
- Fiantis, D. 2006. *Laju Pelapukan Kimia Debu Vulkanis Gunung Talang dan Pengaruhnya Terhadap Proses Pembentukan Mineral Liat Non-Kristalin*. Universitas Andalas, Padang.
- Fitter, A.H. dan R.K.M Hay. 1991. *Fisiologi Lingkungan Tanaman*. Gajah Mada University Press, Yogyakarta.
- Fornasieri, F.D. and J.L. Fornasieri. 1993. *Manual da cultura do arroz*. Jaboticabal, FUNEP. 221p.

- Gao, X., C.H. Zou, L. Wang, and F. Zhang. 2006. Silicon Decreases Transpiration Rate and Conductance from Stomata of Maize Plants. *Journal Plant Nutrition*, 29: 1637- 1647.
- Gardner, F.P., R.B. Pearce, dan R.L. Mitchell. 2008. Physiology of Crop Plants (Fisiologi Tanaman Budidaya, *alih bahasa: Herawati Susilo, pendamping: Subiyanto*). Penerbit Universitas Indonesia (UI-Press), Jakarta.
- Gealy, D.R. and R.J. Bryant. 2009. Seed Physicochemical Characteristics of Field grown US Weedy Rice (*Oryza sativa*) Biotypes: Contrasts with Commercial Cultivars. *Journal of Cereal Science*, 49: 239-245.
- Goldsworthy, P.R. dan N.M. Fisher. 1992. *Fisiologi Tanaman Budidaya Tropik*. Penerjemah : Tohari. Gadjah Mada University Press. 874 hal.
- Gong, H.J, K.M. Chen, G. Chen, S. Wang, and C.L. Zhang. 2005. Effects of Silicon on Growth of Wheat under Drought. *13th International Soil Conservation Organisation Conference – Brisbane July*. pp 10-11.
- Gong, H. and K. Chen. 2012. The Regulatory Role of Silicon on Water Relations, Photosynthetic Gas Exchange, and Carboxylation Activities of Wheat Leaves in Field Drought Conditions. *Acta Physiology Plant*, 34: 1-6.
- Gholami, Y. and A. Falah. 2013. Effects of Two Different Sources of Silicon on Dry Matter Production, Yield and Yield Components of Rice, Tarom Hashemi Variety and 843 Lines. *International Journal of Agriculture and Crop Sciences*, 5(3): 227-231.
- Hamim. 2003. Underlying Drought Stress Effects on Plants: Inhibition of Photosynthesis. *Hayati*, 11: 164-169.
- Hattori, T., S. Inanaga, H. Araki, P. An, S. Morita, M. Luxova, and A. Lux. 2005. Application of Silicon Enhanced Drought Tolerance in *Sorghum bicolor*. *Physiologia Plantarum*, 123: 459–466.
- Heuer, B. 1994. *Osmoregulatory Role of Proline in Water and Salt Stressed Plants* dalam Pessarakhli, M (Ed). Handbook of plant and Crop Stress. Marceel Dekker. Inc. New York. 363-382.
- Hosseini, S.Z., N.A.B. Jelodar, and N.A. Bagheri. 2011. Effect of Silica on Morphological Traits and Resistance of Rice to Striped Stem Borer (*Chilo suppressalis* Walker). *Plant Ecophysiology*, 3: 95-100.

- Husnain. 2010. Mengenal Silika sebagai Unsur Hara. *Warta Penelitian dan Pengembangan Pertanian*, 32(3): 19-20.
- Idris, M.T., M.M. Hossein and F.A. Chudhury. 1975. the Effects of Silicon on Lodging of Rice in Presence of added Nitrogen. *Plant and Soil*, 43:691-695.
- Iller, R.K. 1979. *The Chemistry of Silica*. Wiley, New York.
- Johansen, D.A. 1940. *Plant Microtechnique*. McGraw Hill, New York, p.523.
- Jones, L. and K. Handreck. 1967. Silica in Soils, Plants, and Animals. *Advances in Agronomy*, 19(2): 107-149.
- Juo, A.S.R. and P.A. Sanchez. 1986. *Soil Nutritional Aspects with a View to Characterize Upland Rice Environments*. Paper presented at the 2nd International Upland Rice Conference.
- Kamenidou, S., T.J. Cavins, and S. Marek. 2009. Evaluation of Silicon as a Nutritional Supplement for Greenhouse Zinnia Production. *Scientia Horticulturae*, 119(3): 297-301.
- Karmollachaab, A., A. Bakhshandeh, M.H. Gharineh, M.R.M. Telavat, and G. Fathi. 2013. Effect of Silicon Application on Physiological Characteristics and Grain Yield of Wheat under Drought Stress Condition. *International Journal of Agronomy and Plant Production*, 4(1): 30-37.
- Kaya, C., L. Tuna, and D. Higgs. 2006. Effect of Silicon on Plant Growth and Mineral Nutrition of Maize Grown under Water Stress Condition. *Journal Plant Nutrition*, 29: 1469- 1480.
- Keeping, M.G., J.H. Meyer, and C. Sewpersad. 2013. Soil silicon amendments increase resistance of sugarcane to stalk borer *Eldana saccharina* Walker (Lepidoptera: Pyralidae) under field conditions. *Plant Soil*, 363:297-318.
- Kim, D.D., A.S. Fabiola , M.P. Boric and W.N. Duran. 2008. Mechanisms of Acupuncture and Herbal Medicine in Hypertension. *Asian Biomedicine*, 2(4): 1-18.
- Kluge, M. 1976. *Carbon and Nitrogen Metabolism under Water Stress*. p. 243-252. In O.L. Lange, L. Kappen and E.D. Schulze (Eds). *Water and Plant Life, Problem and Modern Approaches*. Springer Verlag, Berlin.

- Korndorfer, G. and I. Lepsch. 2001. Effect of Silicon on Plant Growth and Crop Yield. *Studies in Plant Science*, 8: 133-147.
- Korndorfer, G.H., Snyder G.H., M. Ulloa, and L.E. Datnoff. 2001. Calibration of Soil and Plant Silicon for Rice Production. *Journal Plant Nutrition*, 24(7): 1071-1084.
- Kramer, P.J. 1983. *Water Relations of Plants*. Academic Press Inc, Orlando, Florida. P. 342 –389.
- Kristamtini dan H. Purwaningsih. 2009. Potensi Pengembangan Beras Merah sebagai Plasma Nutfah Yogyakarta. *Jurnal Litbang Pertanian*, 28(3): 88-95.
- Kurniasih, B. 2002. Sifat Perakaran Beberapa Varietas Padi Gogo dalam Cekaman Residu Alelopati Gulma. *Jurnal Agrivita*, 24: 47-52.
- Lehninger. 1982. *Dasar-Dasar Biokimia*. Jilid 1. Erlangga, Jakarta.
- Leonard, W.H. and J.H. Martin. 1963. *Cereal Crops*. Mc. Millan, New York.
- Li, Q.F., C.C. Ma, and Q.L. Shang. 2007. Effects of Silicon on Photosynthesis and Antioxidative Enzymes of Maize Under Drought Stress. *Chinese Journal of Applied Ecology*, 18: 531–536.
- Li, S., J. Chen, and Q. Zuo. 2007. Influences of Optimizing Fertilization on the Growth and Yield of Rice Variety Wandao68. *Journal Anhui Agricultural Science*, 35: 8571–8573.
- Liang, Y., Q. Chen, W. Zhang, and R. Ding. 2003. Exogenous Silicon Increases Antioxidant Enzyme Activity and Reduces Lipid Peroxidation in Root of Salt-Stressed Barley (*Hordeum vulgare* L.). *Plant Physiology*, 160: 1157–1167.
- Liu, T. and J. Van Staden. 2000. Selection and Characterization of Sodium Chloride-Tolerant Callus of *Glycine max* (L.) Merr. cv. 'Acme'. *Plant Growth Regulation*, 31: 195–207.
- Lomboan, N. J. 2002. Tiga Primadona Merah Tahun 2002. *Nirmala Edisi Tahunan*.
- Ma, J.F., K. Nishimura, and E. Takahashi. 1989. Effect of Silicon on the Growth of Rice Plant at Different Growth Stages. *Soil Science Plant Nutrition*, 35: 347-356.

- Ma, J.F., Y. Miyake, and E. Takahashi. 2001. Silicon as a Beneficial Element for Crop Plants. p. 17-39. In L.E. Datnoff, G.H. Snyder, and G.H. Korndorfer (eds) *Silicon in agricultures*. Elsevier Science B.V., Netherlands.
- Ma, J.F. and E. Takahashi. 2002. *Soil, Fertilizer, and Plant Silicon Research in Japan*. Elsevier Science B.V., Netherlands.
- Ma, J.F. 2004. Role of Silicon in Enhancing the Resistance of Plants to Biotic and Abiotic Stresses. *Soil Science Plant Nutrition*, 50: 11-18.
- Ma, J.F. and N. Yamaji. 2006. Silicon Uptake and Accumulation in Higher Plants. *TRENDS in Plant science*. 11: 1-8.
- Ma, J.F., K. Tamai, N. Yamaji, N. Mitani, S. Konishi, M. Katsuhara, M. Ishiguro, Y. Murata, and M. Yano. 2006. A Silicon Transporter in Rice. *Nature*, 440: 688-691.
- Mansfield, T.A. and C.J. Atkinson. 1990. *Stomatal Behaviour in Water Stressed Plants*. P. 241-264 in R.G. Alscher and J.R. Cumming (Eds.). *Stress Response in Plants Adaptation and Acclimation Mechanisms*. Wiley-Liss. Inc. New York.
- Mathius, N.T., T. Liwang, M.I. Danuwikarsa, G. Suryatmana, H. Djajasukanta, D. Saodah, dan I.G.P.W. Astika. 2004. Respon Biokimia Beberapa Progeni Kelapa Sawit (*Elaeis guineensis* Jacq.) terhadap Cekaman Kekeringan pada Kondisi Lapang. *Menara Perkebunan*, 72(2): 38-56.
- Matoh, T., S. Murata and E. Takahashi. 1991. Effect of Silicate Application on Photosynthesis of Rice Plants (in Japanese). *Journal Soil Science Plant Nutrition*, 62: 248-251.
- McCord, J.M. 2000. The Evolution of Free Radicals and Oxidative Stress. *America Journal Medicine*, 108(8): 652-659.
- McCray, J.M. and S. Ji. 2013. Comparison of Silicon Sources for Sugarcane on Mineral and Organic Soils in Florida. *Journal American Society of Sugar Cane Technologists*, 33: 1-19.
- Miyoshi, H. and H. Ishii. 1960. Effect of Silicic Acid and Silicic Slag on Paddy Rice. *Journal Science Soil Tokyo*, 31: 146-148.

- Moghadam, M.R.K., and H. Heidarzadeh. 2014. Response of Silicate Fertilizer Effects, Rice Husk and Rice Husk Ash on Rice Paddy Growth and Seed Yield (Shiroodi Cultivar) in Pot Condition. *International Journal of Farming and Allied Sciences*, 3(4): 449-452.
- Mohammadi, A.A., A. Majid, M.R. Bihamta, and H. Heydari. 2006. Evaluation of Drought Stress on the Morphological Characteristics of Cultivated Wheat Varieties. *Journal of Research and Development*. 73: 184-192.
- Munir, M. 1996. *Tanah – Tanah Utama Indonesia*. Pustaka Jaya, Jakarta.
- Muriithi, C., E. Mugai, A.W. Kihurani, C.J. Nafuma, and S. Amboga. 2009. Determination of Silicon from Rice by-Products and Chemical Sources on Rice Blast Management. *KARI Research Centre-Embu*, 7-13.
- Nakata, Y., M. Ueno, J. Kihara, M. Ichii, S. Taketa, and S. Arase. 2008. Rice Blast Disease and Susceptibility to Pests in a Silicon Uptake-Deficient Mutant. *Crop Protection*, 27: 865-868.
- Norsalis, E. 2011. Padi Gogo dan Sawah. http://skp.unair.ac.id/repository/Guru-Indonesia/Padigogodansawah_ekonorsalis_17170.pdf. Diakses pada tanggal 2 juni 2014.
- Oki, T., M. Masuda, S. Nagai, M. Takeichi, and Sato. 2002. *Radical : Scavenging Activity of Red and Black Rice*. Japan.
- Prabagar, S., M.J. Hodson, and D.E. Evans. 2011. Silicon Amelioration of Aluminium Toxicity and Cell Death in Suspension Cultures of Norway Spruce (*Picea Abies* (L.) Karst.). *Environment Exper Botany*, 70: 266-276.
- Rahayu, A.Y. dan T. Harjoso. 2011. Aplikasi Abu Sekam pada Padi Gogo (*Oryza sativa* L.) terhadap Kandungan Silikat dan Prolin Daun serta Amilosa dan Protein Biji. *Biota*, 16 (1): 48–55.
- Rani, Y.A., A. Naraynan, V.S. Devi, and P. Subbaramamma. 1997. Effect of Silicon Application on Growth and Yield of Rice Plant. *Plant physiology*, 11(2): 125-128.
- Raymond, M.J. and N. Smirnoff. 2002. Prolin Metabolism and Transport in Maize Seedling at Low Water Potensial. *Annual Botanical*, 89: 813-823.
- Rodrigues, F.A., G.H. Korndorfer, G.F. Correa, G.B. Buki, O.A. Silva, and L.E. Datnoff. 2001. Response of Six Gramineae Species to Application of Calcium Metasilicate. In L.E. Datnoff, G.H. Snyder, and G.H. Korndorfer

(Eds.), *Silicon in Agriculture. Studies in Plant Science*, 8: 378, Elsevier Science BV, Netherlands.

Rodrigues, F.A. and L.E. Datnoff. 2005. Silicon and Rice Disease Management. *Fitopatologia Brasileira*, 30(5): 457-469.

Roesmarkam dan N.W. Yuwono. 2002. *Ilmu Kesuburan Tanah*. Kanisius, Yogyakarta.

Santika, A. dan Rozakurniati. 2010. Teknik Evaluasi Mutu Beras Ketan dan Beras Merah pada Beberapa Galur Padi Gogo. *Buletin Teknik Pertanian*, 15(1): 1-5.

Sarief, E.S. 1986. *Ilmu Tanah Pertanian*. Pustaka Buana, Bandung.

Savant, N.K., G.H. Snyder, and L.E. Datnoff. 1996. Silicon Management and Sustainable Rice Production. *Advances in Agronomy*, 58: 151-199.

Savant, N.K., G.H. Korndorfer, L.E. Datnoff, and G.H. Snyder. 1999. Silicon Nutrition and Sugarcane Production: a review. *Journal Plant and Nutrition*. 22 (12):1853-1903

Sharma, V.K. and J.C. Fletcher. 2002. Maintenance of Shoot and Floral Meristem Cell Proliferation and Fate. *Plant Physiology*, 129: 31-39.

Simmons, D. and R. Williams. 1997. Dietary Practices Among Europeans and Different South Asian groups in coventry. *Br. Journal Nutrition*, 78: 5-14.

Smirnoff, N. 1993. The Role of Active Oxygen in the Response of Plants to Water Deficit and Desiccation. *New Phytology*, 125: 27-58.

Sokolova, T.A. 1985. *The Clay Mineral in the Humid Regions of USSR*. Novosibirk, Nayka.

Solichatun, E. Anggarwulan, dan W. Mudyantini. 2005. Pengaruh Ketersediaan Air terhadap Pertumbuhan dan Kandungan Bahan Aktif Saponin Tanaman Ginseng Jawa (*Talinum paniculatum* Gaertn.). *Biofarmasi*, 3 (2): 47-51.

Soratto, R. P., C. A. C. Crusciol, G. S. A. Castro, C. H. M. da Costa and J. F. Neto. 2012. Leaf Application of Silicic Acid to White Oat and Wheat. *R. Bras. Ci. Solo*, 36: 1538-1544.

- Suardi, K. D. 2005. *Potensi Beras Merah untuk Peningkatan Mutu Pangan*. Balai Besar Penelitian dan Pengembangan Bioteknologi Sumberdaya Genetik Pertanian, Bogor.
- Sudaryo dan Sutjipto. 2009. Identifikasi dan Penentuan Logam pada Tanah Vulkanik di Daerah Cangkringan Kabupaten Sleman dengan Metode Analisis Aktivasi Neutron Cepat. *Seminar Nasional V SDM Teknologi Nuklir Yogyakarta*. Sekolah Tinggi Teknologi Nuklir BATAN, Yogyakarta.
- Sumida, H. 2002. Plant Available Silicon in Paddy Soil. National Agricultural Research Center for Tohoku Region Omagari. *Second Silicon in Agriculture Conference*. Tsuruoka, Yamagata. Japan. 21: 43-49.
- Sunilkumar, B. and V.L. Geethakumari. 2002. Shade Response of Upland Rice Cultivars (*Oryza sativa* L.) as Influenced by Silica Application. *Journal of Tropical Agriculture*, 40: 67-70.
- Surapornpiboon, P., S. Julsrigival, C. Senthong, and D. Karladee. 2008. Effects of Silicon on Upland Rice under Drought Condition. *CMU Journal Natural Science*, 7(1): 163-171.
- Suryani, A.S. 2014. Dampak Negatif Abu Vulkanik terhadap Lingkungan dan Kesehatan. *Info Singkat Kesejahteraan Sosial*, VI(04): 9-12.
- Snyder, G.H., D.B. Jones and G.J. Gascho. 1986. Silicon Fertilization of Rice on Everglade Histosols. *Soil Science American Journal*, 50: 1259-1263.
- Tezara, W. and D.W. Lawlor. 1995. Effects of water stress on biochemistry and physiology of sunflower, dalam *Photosynthesis: from Light to Biosphere*. Diedit oleh M. Mathis (Ed.). London: Kluwer Academic Publisher. Vol. IV, 625-628.
- Tjitrosupomo, G. 2005. *Morfologi Tumbuhan*. Gadjah Mada University Press, Yogyakarta.
- Trenholm, L.E., L.E. Datnoff, and R.T. Nagata. 2004. Influence of Silicon on Drought and Shade Tolerance of St. Augustine Grass. *Horticulture Technology*, 14(4), 487-490.
- Uyprasert, S., T. Toojida, N. Udomprasert, S. Tragoonrung, and Vanavichit. 2004. Proline Accumulation and Rooting Pattern in Rice in Response to Water Deficits Under Rainfed Lowland. *Science Asia*, 30: 301-311.

- Vaculik, M., T. Landberg, M. Greger, M. Luxova, M. Stolarikova and A. Lux. 2012. Silicon Modifies Root Anatomy, and Uptake and Subcellular Distribution of Cadmium in Young Maize Plants. *Annals of Botany*, 110: 433–443.
- Vergara, S.B. 1976. *Physiological and Morphological Adaptability of Rice Varieties to Climates. Varieties and Climates*. IRRI, Manila.
- Vijayakumar, K. 1977. Use of Indigenous Source of Magnesium Silicate as a Soil Amandment. M.Sc. (Ag). *Thesis*. Kerala Agricultural University, Thrissur.
- Violita, 2007. Komparasi Respon Fisiologi Tanaman Kedelai yang Mendapat Cekaman Kekeringan dan Perlakuan Herbisida Paraquat: Kasus kabupaten Bogor. *Tesis*. Bogor: Sekolah Pascasarjana, Institut Pertanian Bogor.
- Voronkov, M.G., G.I. Zelchan, and A.Y. Lykevic. 1978. *Silicon and Life*. Riga, Zinatne.
- Wang, G.M., and C.L. Ihang. 2003. Effect of Silicon on Growth of Wheat under Drought. *Journal of Plant Nutrition*, 26: 1055-1063.
- Yong Y., S. Tai, and X. Bao. 2007. Effects of Silicon on Photosynthesis and Antioxidative Enzymes of Maize Under Drought Stress. *Plant Science*, 18: 531–536.
- Yogendra, N.D., B.H. Kumara, N. Chandrashekar, N.B. Prakash, M.S. Anantha, and H.M. Jeyadeva. 2014. Effect of Silicon on Real Time Nitrogen Management in a Rice Ecosystem. *African Journal of Agricultural Research*, 9(9): 831-840.
- Yoshida, S., D.A. Forno, J.H. Cock, and K.A. Gomez. 1976. *Laboratory Manual for Physiological Studies of Rice*. International Rice Research Institute, Manila.
- Yoshida, S. 1981. *Fundamentals of Rice Crop Science*. International Rice Research Institute, Manila.
- Yukamgo, E. dan N.W. Yuwono. 2007. Peran Silikon sebagai Unsur Bermanfaat pada Tanaman Tebu. *Jurnal Ilmu Tanah dan Lingkungan*, 7(2): 103-116.
- Zhu, Z., G. Wei, J. Li, Q. Qian, J. Yu. 2004. Silicon Alleviates Salt Stress and Increases Antioxidant Enzymes Activity in Leaves of Salt-Stressed Cucumber (*Cucumis Sativus* L.). *Plant Science*, 167: 527–533.