

## DAFTAR PUSTAKA

- Alloway, B.J. 2008. Micronutrient Deficiencies in Global Crop Production. Springer Sci. p. 1-36.
- APTINDO (Asosiasi Produsen Tepung Terigu Indonesia). 2013. Gandum Serealia Berprotein Tinggi. Tersedia di <http://www.aptindo.or.id>. Diakses pada tanggal 24 Agustus 2014.
- Ashari, P. R. 2008. Peningkatan Kualitas *Anthurium Hookeri* Melalui Pemberian Unsur Boron (B). Skripsi. Fakultas Pertanian Universitas Sebelas Maret. Surakarta.
- Asri B., E. Syam'un, dan B. D. R. M. Farid. 2013. Produksi Tiga Varietas Gandum Pada Berbagai Ketinggian Tempat. Tesis Program Studi Sistem-sistem Pertanian Pascasarjana Universitas Hassanudin, Makassar.
- BALITSERAL (Balai Penelitian Tanaman Sereal). 2010. Pembentukan Varietas Unggul Baru Tanaman Serealia. <http://balitsereal.litbang.pertanian.go.id>. Diakses pada tanggal 8 Desember 2014.
- Brown, P. H. and E. Bassil. 2011. Overview of The Acquisiton and Utilization of Boron, Chlorine, Copper, Manganese, Molybdenum, and Nickel by Plants and Prospects for Imrpovement of Micronutrient Use Efficiency. In M. J. Hawkesford and P. Barrachlough (eds). The Molecular and Physiological Basis of Nutrient Use Effeciency in Crops. John Willey and Song Publication. p. 377-387.
- Brown, P.H. and B. J. Shelp. 1997. Boron Mobility in Plants. Plant and Soil 193: 85-101.
- Brown, P.H. and H. Hu. 1997. Does boron play only a structural role in the growing tissues of higher plants?. Plant and Soil 196: 211-215.
- Brown, P.H., N. Bellaloui, and M.A. Wimmer. 2002. Boron in Plant Biology. Plant biology 4: 205-223.
- Cakmak, I. and V. Romheld. 1997. Boron Defecency-Induced Impairments of Cellular Function in Plants. Plant and Soil 193: 71-83.
- Camacho – Cristobal, J.J., J. Rexach, and A. Gonzales – Fontez. 2008. Boron Defecency and Toxicity. Univ. of Pablo de Olivade Spain. p. 1-14.
- Cervilla, L. M., M. A. Rosales, M. M. Rubio-Wilhelmi, E. Sanchez-Rodriguez, B. Blasco, J. J. Rios, L. Romeo, and J. M. Ruiz. 2009. Involvement of Lignification and Membrane Permeability in The Tomato Root Response to Boron Toxicity. Plant Sci. 176: 545-552.



- Dell, B., and L. B. Huang. 1997. Physiological Response of Plants to Low Boron. *Plant and Soil* 193: 103-120
- Direktorat Jenderal Tanaman Pangan. 2008. Bahan Publikasi : Pengembangan Gandum.[http://tanamanpangan.pertanian.go.id/files/buletin\\_pascapanen](http://tanamanpangan.pertanian.go.id/files/buletin_pascapanen). Diakses pada tanggal 9 September 2014.
- Gardner, F., R. Brent Pearce, dan R. L. Mitchell. 1991. *Fisiologi Budidaya Tanaman* (Terjemahan). UI Pres. Jakarta
- Gauch, H.G. 1972. Inorganic Plant Nutrition. *In* J. A. Raven (eds). Short- and Long-Distance Transport of Boric Acid in Plants. *New Phytol.* 84: 231-249
- Geof Hughes-Games. 1991. Boron For Field Crops. Ministry of Agriculture and Food Canada. Soil Factsheet. Order No. 631.012-1. p. 1-3.
- Ginta, J. 2005. Unsur Hara Mikro yang Dibutuhkan Tanaman. *dalam* P. R. Ashari (ed). Peningkatan kualitas *Anthurium hookeri* melalui pemberian unsur hara boron (B). Skripsi Jurusan Agronomi Fakultas Pertanian Universitas Sebelas Maret, Semarang.
- Gunes, A., M. Alpaslan, and A. Inal, M. S. Adak, F. Eraslan, and N. Cicek. 2003. Effects of Boron Fertilization on The Yield and Some Yield Components of Bread and Durum Wheat. *Turk. J. Agric.* 27: 329-335.
- Gupta U. and H. Solanki. 2012. Change in Phenol Metabolism and IAA Oxidase Activity of Brinjal (*Solanum melongena* L.) Plant in Response to Foliar Application of Different B Concentrations. *Life Sci. Leaflets*, p. 399-408.
- Gusmayanti, E. 2000. Penentuan Potensi Pengembangan Tanaman Gandum (*Triticum aestivum*) di Indonesia Menggunakan Model Simulasi Tanaman. *dalam* A. Permadi (ed.) Pendugaan dan Pemetaan Produktivitas Potensial Tanaman Gandum (*Triticum aestivum*) Dengan Menggunakan Model Lintul 1 Di Pulau Jawa. Skripsi Jurusan Geofisika dan Meteorologi Program Studi Agrometeorologi FMIPA Institut Pertanian Bogor.
- Hamdani, M., Sriwidodo, Ismail, dan M. M. Dahlan. 2002 Evaluasi Galur Gandum Introduksi dan CIMMYT. *dalam* M. Hamdani dan O. Komalasari (ed.) Uji Adaptasi Beberapa Galur/Varietas Gandum di NTT. Prosiding Pekan Serealia Nasional. Balai Penelitian Tanaman Pangan dan Serealia Maros Sulawesi Selatan.
- Hays, D. B., J. H. Do, R. E. Mason, G. Morgan, and S. A. Finlanyson. 2007. Heat Stress Induced Ethyelen Production in Development Wheat Grains Induces Kernel Abortion and Increased Maturation in A Susceptible Cultivar. *Plant Sci.* 172: 1113-1123.

- Huang, L., Z. Ye, R.W. Bell, and B. Dell. 2005. Boron Nutrition and Chilling Tolerance of Warm Climate Crop Species. *Ann. of Bot.* 96: 755-767.
- Human, S. 2014. Riset dan Pengembangan Sorgum dan Gandum Untuk Ketahanan Pangan. Pusat Aplikasi Teknologi Isotop dan Radiasi Badan Tenaga Nuklir Nasional (BATAN) Jakarta.
- Lehto, T., T. Ruuhola, and B. Dell. 2010. Boron in Forest Trees and Forest Ecosystem. *Forest Ecol. and Management* 260: 2053-2069.
- Maestri, E., N. Klueva, C. Perrotta, M. Gulli, H. T. Nguyen, and N. Marmiroli. 2002. Molecular genetics of heat tolerance and heat shock proteins in cereals. *Plant Mol. Biol.* 48: 667-681.
- Marschner, P. 2012. Mineral Nutrition of Higher Plants. Third Edition. Academic Press. San Diego USA. p. 233-243.
- Matoh, T., and K. Ochiai. 2005. Distribution and Partitioning of Newly Taken-Up Boron in Sunflower. *Plant and Soil* 278: 351-360.
- Miwa, K., J. Takano., and T. Fujiwara. 2006. Improvement of Seed Yields Under Boron-limiting Conditions Through Overexpression of BOR1, a Boron Transporter for Xylem Loading, in *Arabidopsis thaliana*. *The Plant J.* 46: 1084-1091.
- Mortvedt, J. J., F.R. Cox, L. M. Shuman and R. M. Welch. 1991. Micronutrients in Agriculture. *dalam* P. R. Ashari (ed). Peningkatan kualitas *Anthurium hookeri* melalui pemberian unsur hara boron (B). Skripsi Jurusan Agronomi Fakultas Pertanian Universitas Sebelas Maret Semarang.
- Novizan. 2005. Petunjuk Pemupukan yang Efektif. Agro Media Pustaka. Tangerang. *dalam* P. R. Ashari (ed). Peningkatan kualitas *Anthurium hookeri* melalui pemberian unsur hara boron (B). Skripsi Jurusan Agronomi Fakultas Pertanian Universitas Sebelas Maret Semarang.
- NSW DPI (New South Wales Department of Primary Industries). 2007. Profitable, Sustainable Cropping. Wheat Growth and Development. PROCROP Series. p. 10-85.
- Nur, A., Trikoesoemaningtyas, N. Khumaida, dan S. Sujiprihati. 2010. Phenologi Pertumbuhan dan Produksi Gandum pada Lingkungan Tropika Basah. *dalam* Kumpulan Makalah Prosiding Pekan Sereal Nasional. Balai Penelitian Tanaman Sereal Maros. Sulawesi Selatan.
- Nur, A., M. Azrai, H. Subagio, Soeranto, Ragapadmi, Sustiprajitno, dan Trikoesoemaningtyas. 2013. Perkembangan Pemuliaan Gandum di Indonesia. Balai Penelitian Tanaman Sereal (BALTISEREAL) Maros Sulawesi Selatan. Ilmu Pengetahuan Tanaman Pangan 8 (2): 97-105.

- Nyomora, A. M. S., P. H. Brown, and B. Krueger. 1999. Rate and Time of Boron Application Increase Almond Productivity and Tissue Boron Concentration. *Hort. Sci.* 34 (2): 242-245.
- Nyomora, A. M. S., P.H. Brown, K. Pinney, and V.S. Polito. 2000. Foliar application of boron to almond trees affects pollen quality. *Hort. Sci.* 125 (2): 265-270.
- Philips, R.C. 1980. Phenology and taxonomy of seagrasses. *dalam Nur et al.* (ed). Phenologi Pertumbuhan dan Produksi Gandum pada Lingkungan Tropika Basah. Kumpulan Makalah Prosiding Pekan Sereal Nasional. Balai Penelitian Tanaman Sereal Maros. Sulawesi Selatan.
- Purnomo, A. 2004. Pengembangan Gandum Indonesia dinilai Prospektif dan Menguntungkan. [www.tempo.com](http://www.tempo.com). Diakses pada tanggal 8 Desember 2014.
- Raven, J. A. 1979. Short- and Long – Distance Transport of Boric Acid in Plants. *New Phytol.* 84: 231 – 249.
- Rerkarsem, B., S. Lordkaew, and B. Dell. 1997. Boron Requirement for Reproductive Development in Wheat. *Plant Nutrition for Sustainable Food Production and Environment.*
- Satari, G., Sjamsudin, dan T. Nurmala. 1976. Studi Gandum. Direktorat Bina Produksi Tanaman Pangan. Jakarta. *dalam A. Permadi* (ed.) Pendugaan dan Pemetaan Produktivitas Potensial Tanaman Gandum (*Triticum aestivum*) Dengan Menggunakan Model Lintul 1 Di Pulau Jawa. Skripsi Jurusan Geofisika dan Meteorologi Program Studi Agrometeorologi FMIPA Institut Pertanian Bogor.
- Saunders, D.A. 1988. Characterization of Tropical Wheat Environments; Identification of Production Constraints and Progress Achieved in South and South East Asia. In A.R. Klatt (Eds.) *Wheat Production Constraints in Tropical Environments*. CIMMYT Mexico. p. 12-366.
- Shah, N. H., and G. M. Paulsen. 2003. Interaction of Drought adn High Temperature on photosynthesis and grain-filling of wheat. *Plant and Soil* 257: 219-226.
- Soylu, S., B. Sade, A. Topal, N. Akgun, S. Gezgin, E. E. Hakki, and M. Babaoglu. 2004. Response of Irrigated Durum and Bread Wheat Cultivars to Boron Application in a Low Boron Calcareous Soil. *Turk. J. Agric.* 29: 275-286.
- Stangoulis, J., M. Tate, and R. Graham. 2010. The Mechanism of Boron Mobility in Wheat and Canola Phloem. *Plant Phisiol.* 153: 876-881.

- Sudarmini. 2001. Pertumbuhan dan Perkembangan Tanaman Gandum (*Triticum aestivum* L.) Pada Periode Tanam dan Taraf Pemupukan Nitrogen yang Berbeda. Skripsi Jurusan Geofisika dan Meteorologi Fakultas Matematika dan Ilmu Pengetahuan Alam Institut Pertanian Bogor.
- Syukur, A. 2005. Penyerapan Boron oleh Tanaman Jagung di Pantai Bugel dalam Kaitanya dengan Tingkat Frekwensi Penyiraman dan Pemberian Bahan Organik. *dalam* Ashari, P. R. (ed). Peningkatan Kualitas *Anthurium Hookeri* Melalui Pemberian Unsur Boron (B). Skripsi Fakultas Pertanian Universitas Sebelas Maret Surakarta.
- Tahir, M., A. Tanveer, T. H. Shah, and N. Fiaz. 2009. Yield Response of Wheat (*Triticum aestivum* L.) to Boron Application at Different Growth Stages. *Pakistan Journal of Life and Social Sciences* 7 (1): 39-42.
- Tobing, B.L. 1987. Pengaruh Kadar Air Tanah Terhadap Pertumbuhan, Perkembangan dan Hasil Tanaman Gandum (*Triticum spp.*). *dalam* Sudarmini (ed). Pertumbuhan dan Perkembangan Tanaman Gandum (*Triticum aestivum* L.) Pada Periode Tanam dan Taraf Pemupukan Nitrogen yang Berbeda. Skripsi Jurusan Geofisika dan Meteorologi Fakultas Matematika dan Ilmu Pengetahuan Alam Institut Pertanian Bogor.
- Umiabdullah. 2011. Tepung Terigu. <http://umiabdullah.wordpress.com/artikel-agroindustri/>. Diakses pada tanggal 27 Agustus 2014.
- Untung, O. 2001. Hidroponik Sayuran Sistem NFT. Penebar Swadaya. Jakarta.
- Vanholme, R., B. Demedts, K. Morreel, J. Ralph, and W. Boerjan. 2010. Lignin Biosynthesis and Structure. *Plant Phisiol.* 153: 895-905.
- Vaughan, A. K. F. 1997. The Relation Between The Concentration Of Boron in The Reproductive and Vegetative Organs of Maize Plants and Their Development. *In* P. Marschner (ed.) Mineral Nutrition of Higher Plants. Third Edition. Academic Press. San Diego. p. 233-243.
- Wheeler, T. R., T. D. Hong, R. H. Ellis, G. R. Batts, J. I. L. Morison, and P. Hadley. 1996. The Duration and Rate of Grain Growth, and Harvest index, of Wheat (*Triticum aestivum* L.) in Response to Temperature and CO<sub>2</sub>. *J. of Exp. Bot.* 47 (298): 623-630.
- Wikipedia. 2014. Gandum. <http://id.wikipedia.org/wiki/Gandum>. Diakses pada tanggal 27 Agustus 2014.
- Yang, J., R.G. Sears, B.S. Gill, and G.M. Paulsen. 2002. Growth and senescence characteristics associated with tolerance of wheat alien amphiploids to high temperature under controlled conditions. *Euphytica* 126: 185-193.

Zubaidi, A., V. F. A. Budianto, A. Wiresyamsi, dan H. Abdurrahman. 2014. Pertumbuhan dan Hasil Tanaman Gandum (*Triticum aestivum*) yang Diadaptasikan di Dataran Rendah Pulau Lombok sebagai Alternatif Penganekaragaman Tanaman Pangan Lahan Kering. Jurusan Budidaya Pertanian Universitas Mataram Lombok.

