

DAFTAR PUSTAKA

- Ambarwati dan Yudono, 2003. Keragaan Stabilitas Hasil Bawang Merah (onlin), (http://agrisci.ugm.ac.id/nol10_2. diakses 2 November 2005).
- Anonim, 1997. Pedoman Penggunaan Effective Microorganisme Bagi Negara-Negara Asia Pasific Nature Agriculture Network (APNAN). Makalah Disajikan pada Seminar Nasional Pertanian Organik, Jakarta.
- _____, 1998. Pedoman Bertanam Bawang. Kanisius, Jogjakarta.
- _____, 2001. Statistik Pertanian. Dinas Pertanian Tanaman Pangan Propinsi Sulawesi Selatan, Ujung Pandang.
- _____, 2002. Statistik Pertanian. Dinas Pertanian Kabupaten Enrekang, Enrekang.
- Arafah dan Sirappa, 2001. Introduksi Bahan Organik Jerami dalam Pengelolaan Tanaman dan Sumberdaya Terpadu Padi Sawah. Jurnal Agrivigor, vol. 3 (3) Desember 2002 : 204-213.
- Ayling, S.M., F.A. Smith, R.J. Reid and S.E. Smith. 1997. Physiological Changes in Mycorrhizal Hyphae During Colonisation: Implication of Development. *In* Mycorrhizas in Sustainable Tropical Agriculture and Forest Ecosystem. Paper Presented at The International Conf. Bogor, Indonesia, October 26-30, 1997. LIPI-IPB. Bogor, Indonesia.
- Baon, J.K., Azzura dan Nurkholis, 1997. Growth and Nutrient Uptake Response of Micorrhizal Cocoa Treated with Ccoconut Water as Plant Growth Regulator. *In* Mycorrhizas in sustainable Tropical Agriculture and Forest Ecosystem. Paper Presented at The International Conf. Bogor, Indonesia.
- Brundrett M., 1991. Mycorrhizae Symbiosis, (online), (<http://www.ffp.csiro.au/research/mycorrhizae/mva>, diakses 20 Agustus 2004).
- Cruz, A.F., T. Ishii, and K. Kadoya. 2000. Effect of arbuscular mycorrhizal fungi on tree growth, leaf water potential, and levels of 1-aminocyclopropane-1-carboxylic acid and ethylene in the roots of papaya under water stress conditions. *Mycorrhiza J.* 10 : 121-123.
- Erwidodo. 1994. Analisis Aspek Keuntungan Penggunaan Pupuk di Sektor Pertanian. Makalah Disampaikan Pada Pelatihan Uji Tanah, Bogor.

- Gardner F.P., R.B. Pearce dan R.L. Mitchell, 1991. *Plant Physiology*. UI Press, Jakarta.
- Gazpersz V., 1991. *Metode Perancangan Percobaan*. CV. Armico, Bandung.
- Gusli S, 2002. Serapan P dan Pertumbuhan Tanaman Jagung pada Tanah Kompak Berkepadatan sedang Diaplikasi Mikoriza. *Jurnal Agrivigor*, vol. 2 (3) Desember 2002 :193-202.
- Hardjowigeno, S, 1989. *Ilmu Tanah*. Akademik Pressindo, Jakarta.
- Harran dan Ansori, 1993. *Bioteknologi Pertanian 2*. Pusat antar Universitas Bioteknologi IPB, Bogor.
- Higa, T. and F.P. James, 1994. *Beneficial and Effective Microorganisms. For A Sustainable Agriculture and Environment*. International Nature Farming Research Center Atami, Japan.
- Islami, T., dan W.H. Utomo. 1995. *Hubungan Tanah, Air dan Tanaman*. IKIP Semarang, Semarang.
- Jalil, B.L., 1993. Relevance of VA-Mycorrhizal System in The Management of Root-Borne Disease. P. 46. *In* I. Soerianegara and Supriyanto (ed). *Proc. Of Second Asian Conf. on Mycorrhiza*, Chiang Mai Thailand. 11 – 15 March 1991. SEAMEO BIOTROP. Bogor, Indonesia.
- Jumin, H.B., 1989. *Ekologi Tanaman, Suatu Pendekatan Fisiologis*. Rajawali, Jakarta.
- Kabirun. S dan J Widodo, 1997. Growth Responses of Upland-Rice to Vesicular Mycorrhizal Infection Level of Aplied Phosphorus. *In* Mycorrhizas in Sustainable Tropical Agriculture and Forest Ecosystem. Paper Presented at The International Conf. Bogor, Indonesia, October 26-30, 1997. LIPI-IPB. Bogor, Indonesia.
- Katriani M, Ramly dan Jumriah, 2003. Pertumbuhan dan Hasil Tanaman Kacang Tanah pada Berbagai Dosis Bokashi Pupuk Kandang Ayam. *Jurnal Agrivigor*, vol.3 (2) Agustus 2003 hal : 128-135.
- Kern, J.S. and M.G. Johnson , 1993. Conventional Tillage Impacts on Soil and Atmospheric Carbon Levels. *Soil Sci.Am.J.* 57:200-210.

- Keusgen, M., 2002. Allium Crops Science. Institute for Pharmaceutical Biology University of Bonn, NuBalle, D-53115 Bonn, German.
- Killham, K., 1994. Soil Ecology. Cambridge University Press, Cambridge.
- Kusumastuti, A., 1997. Peranan Mikoriza Vesikular Arbuskular dan emupukan Fosfor terhadap Pertumbuhan Bibit Kopi Robusta. Skripsi Fakultas Pertanian dan Kehutanan, Universitas Hasanuddin, Ujungpandang
- Las, Yanto, S. Mulyadi dan Z. Zaini, 1986. Identifikasi dan Interpretasi Agroklimat Taman Bogo, Lampung Tengah. Seminar Hasil Penelitian Tanaman Pangan, Padi (2). Badan Penelitian dan Pengembangan Tanaman Pangan, Bogor.
- Linderman, R.G., 1994. Role of Vam Fungi in Biocontrol. P. 1-25. In F.L. Pflieger and R.G Linderman (ed). Mycorrhizae and Plant Health. The American Phytopathological Society, St Paul, Minnesota, USA.
- Marschner, 1994. Nutrient Dynamics at the Soil-Root Interface (Rhizosphere). *In Mycorrhizas in Ecosystems*. University Press, Cambridge.
- McGonigle, T.P.M. and M.H. Miller, 1993. Mycorrhizal development and phosphorus absorption in maize under conventional and reduced tillage (online). *Soil Sci. Soc. Am. J.* 57 (4) , 1002-1006, (<http://mycorrhizae.ag.utk.edu/latest/>, diakses 18 Agustus 2004).
- Millarr, A.H. and J. L. Heazlewood, 2003. Genomic and proteomic analysis of mitochondrial carrier proteins in Arabidopsis. *Plant Physiology*.
- Muntoya, M., 1994. Menuju Pertanian Alami dengan Teknologi Effective Microorganismes Tumbuh : 24 – 26, Jakarta.
- Nane N.M., 2000. Efektivitas Pemupukan Bokashi Pupuk Kandang Terhadap Produktivitas Beberapa Varietas Bawang Merah. Tesis S2. Program Pascasarjana. Universitas Hasanuddin Makassar.
- Nuraeni, 1999. Pengaruh Inokulasi Mikoriza Arbuskular dan *Rhizobium japonicum* dengan Pemberian N dan P terhadap Kadar Protein dan Vigor Benih Kedelai. Tesis Program Pascasarjana Universitas Hasanuddin Makassar.

- Nurhalisyah, 2003. Pertumbuhan dan Produksi Kentang (*Solanum tuberosum* L.) Varietas Granola pada pemberian pupuk organik Kascing dan inokulasi Mikoriza Vesikuar Arbuskular. Tesis S2. Program Pascasarjana. Universitas Hasanuddin Makassar.
- Oberbauer, S. F., B. R. Strain and Fetcher, 1985. Effect of CO₂ enrichment on seedling physiology and growth of two tropical tree species. *Plant Physiology*.
- Petojos, 2003. Benih Bawang Merah. Kanisius, Yogyakarta.
- Prematuri, R. and J.C. Dodd, 1997. The Effect Arbuscular Fungi on Albizia saman and their Biochemical detection in Roots. *In Mycorrhizas in Sustainable Tropical Agriculture and Forest Ecosystem*. Paper Presented at The International Conf. Bogor, Indonesia, October 26-30, 1997. LIP-IPB. Bogor, Indonesia.
- Purwani, J.; T. Prihatini, A. Kentjanasari, R. Hidayat, 1998. Pengaruh Jenis Bokashi terhadap Kandungan Unsur Hara Tanah, Populasi Mikrobial dan Hasil Padi di Lahan Sawah. *Prosiding Pertemuan Pembahasan dan Komunikasi Hasil Penelitian Tanah dan Agroklimat : Bidang Kimia dan Biologi Tanah*, P : 251 – 265 (No. 14).
- Putrasemedja, S., dan Suwandi, 1996. Varietas Bawang Merah di Indonesia. Pusat Penelitian dan Pengembangan Hortikultura, Badan Penelitian dan Pengembangan Pertanian, Balai Penelitian Tanaman Sayuran, Lembang.
- Rahmat R, 1994. Bawang Merah. Budi Daya dan Pengelolaan Pascapanen. Kanisius. Yogyakarta.
- Rao, N.S Subha. 1994. Mikroorganisme Tanah dan Pertumbuhan Tanaman. Edisi Kedua. Universitas Indonesia, Jakarta.
- Reganold, J. P., 1989. Comparison of Soil Properties as Influenced by Organic and Conventional farming Systems. *American Alternative Agriculture* 3: 144-145.
- Reijntjes C., Haverkort B., and Water-Bayer, 1999. Pertanian Masa Depan. Kanisius, Yogyakarta
- Richards, B.N., 1989. *The Microbiology of Terrestrial Ecosystem*, Longman Scientific & Technical Inc., Singapore.

- Rismunandar, 1989. Membudidayakan Lima Jenis Bawang. Sinar Baru, Bandung.
- Rozi, M.F., 1998. Aplikasi Mikoriza Vesikular Arbuskuler dan Pemupukan Urea, TSP dan KCl terhadap Pertumbuhan Bibit Tebu (*Saccharum officinarum* L). Skripsi Fakultas Pertanian dan Kehutanan, Universitas Hasanuddin, Ujungpandang.
- Sahiri, N.. 1998. Studi Penguraian Bahan Organik Tumbuhan Liar Dengan Menggunakan EM-4 Pada Berbagai Kerapatan Jagung Manis. *Agroland* Vol. 7 (1) : 47 – 55.
- Salisbury, F.B dan Ross W.R., 1995 Fisiologi Tumbuhan. ITB, Bandung
- Samadi, B., dan B. Cahyono, 1996. Intensifikasi Budidaya Bawang Merah. Kanisius, Yogyakarta.
- Satyer T.O., 1969. Physiological Significance of Internal Water Relations to Crop Yield. P 53 – 79 J.D Easte (ed). *Physiological Aspect Yield Am. SOC. Agron Medson Wisconsin*.
- Setiadi Y., 1990. Proses Pembentukan VA Mikoriza. Kursus Singkat Teknologi Mikoriza. Bogor 11 Desember 1989- 7 Januari 1990.
- Setiawan I.A., 2003. Memanfaatkan Kotoran Ternak. Penebar Swadaya, Jakarta.
- Singgih W., 1988. Budidaya Bawang. Penebar Swadaya, Jakarta.
- Smith, S.E., S.M. Ayling, G. Rosewarne, S. Dickson, D.P. Shachtman, S.J. Barker, R.J. Reid., G. Delp, and F.A. Smith, 1997. Transport Nutrients Between Vesicular-Arbuscular (VA) Mycorrhiza Symbionts: Insights From Molecular And Physiological Studies. *In Mycorrhizas in Sustainable Tropical Agriculture and Forest Ecosystem*. Paper Presented at The International Conf. Bogor, Indonesia, October 26-30, 1997. LIPHIPB. Bogor, Indonesia.
- Soemaryono, H., dan P. Soedomo, 1993. Budidaya Bawang Merah. Sinar Baru, Bandung.
- Soepardi, G., 1983. Sifat dan Ciri Tanah. Departemen Ilmu Tanah. Institut Pertanian Bogor, Bogor.
- Sri Setyati H., 1979. Pengantar Agronomi. Gramedia, Jakarta.

- Stoate, C., ND., R.J. Boatman, C.R. Borallho, G.R. Carvalho, de Snoo, and P., Eden, 2001. Ecological Impacts of Arable Intensification in Europe, (online), *J Environ Manage*, 63(4); 337 – 65, <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>, diakses 22 Agustus 2004).
- Susanto, R., 2002. Penerapan Pertanian Organik. Pemasarakatan dan Pengembangannya. Kanisius, Yogyakarta.
- Sutedjo, M.M., Kartasaputra dan Sastroatmodjo, 1991. Mikrobiologi Tanah. Rineka Cipta. Jakarta.
- Thomas, R.S., R.L. Franson, and G.J. Bethlenfalvay. 1993 Separation of arbuscular mycorrhizal fungus and root effect on soil aggregation. *Soil Sci. Soc. Am. J.* 57 : 77-81, (<http://mycorrhizae.ag.utk.edu/latest/>, diakses 21 Agustus 2004).
- Wididana, G.N. dan T. Higa, 1993. The role of Effective Microorganism 4 in Improving Soil Fertility and Productivity. *Bull. Kyusei Nature Farming*. Jakarta 3:82-89.
- Wild, A., 2001. *Soils and The Environment*, Cambridge University Press, Canbridge, UK (p 68-88).
- Wolfe, D., 1994. Physiological and growth responses to atmospheric carbon dioxide concentration. *Hand book of plant and crop physiology*. Marcel Dekter Inc, New York.
- Wright, S.F. and A. Upadhyaya, 1998. A Survey of Soils for Aggregate Stability and glomalin, a glycoprotein produced by hyphae of arbuscular mycorrhizal fungi. *Plant and Soil* 198 : 97 - 107.
- Zakaria, B., 1999. Aktivitas Fotosintesis dan Rubisco Tanaman yang Diberi Metanol pada Berbagai Tingkat Cekaman Air. Kasus pada Tanaman Kapas di Lahan Sawah Tadah Hujan. Pascasarjana, Makassar.

Lampiran 1. Tabel sidik ragam kecepatan tumbuh tanaman bawang merah pada berbagai jenis bokashi dan dosis mikoriza

| SK | db | JK | KT | F _{Hitung} | F _{.Tabel} | |
|-----------|----|--------|-------|----------------------|---------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 0,976 | 0,488 | 1,20 ^{tn} | 19,00 | 99,00 |
| V | 1 | 3,124 | 3,124 | 7,66 ^{tn} | 18,51 | 98,49 |
| Galat (a) | 2 | 0,816 | 0,408 | | | |
| B | 3 | 3,097 | 1,032 | 4,03* | 3,49 | 5,95 |
| VB | 3 | 0,693 | 0,231 | 0,90 ^{tn} | 3,49 | 5,95 |
| Galat (b) | 12 | 3,072 | 0,256 | | | |
| M | 2 | 3,505 | 1,752 | 8,90** | 3,30 | 5,34 |
| VM | 2 | 0,002 | 0,001 | 0,0060 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 0,309 | 0,052 | 0,26 ^{tn} | 2,40 | 3,42 |
| VBM | 6 | 0,640 | 0,107 | 0,54 ^{tn} | 2,40 | 3,42 |
| Galat c) | 32 | 6,302 | 0,197 | | | |
| Total | 71 | 22,536 | | | | |

KK (a) = 10,69%

KK (b) = 8,47%

KK (c) = 7,43%

Lampiran 2. Tabel sidik ragam indeks luas daun bawang merah pada berbagai jenis bokashi dan dosis mikoriza pada umur 21 hst

| SK | db | JK | KT | F _{Hit} | F _{.Tabel} | |
|-----------|----|---------|---------|-----------------------|---------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 0,00100 | 0,00050 | 0,78041 ^{tn} | 19,00 | 99,00 |
| V | 1 | 0,00016 | 0,00016 | 0,25 ^{tn} | 18,51 | 98,49 |
| Galat (a) | 2 | 0,00129 | 0,00064 | | | |
| B | 3 | 1,95805 | 0,65268 | 1686,48** | 3,49 | 5,95 |
| VB | 3 | 0,00060 | 0,00020 | 0,51 ^{tn} | 3,49 | 5,95 |
| Galat (b) | 12 | 0,00464 | 0,00039 | | | |
| M | 2 | 0,04498 | 0,02249 | 54,48** | 3,30 | 5,34 |
| VM | 2 | 0,00007 | 0,00003 | 0,0803 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 0,01873 | 0,00312 | 7,56** | 2,40 | 3,42 |
| VBM | 6 | 0,00163 | 0,00027 | 0,66 ^{tn} | 2,40 | 3,42 |
| Galat c) | 32 | 0,01321 | 0,00041 | | | |
| Total | 71 | 2,04437 | | | | |

KK (a) = 9,38%

KK (b) = 6,53%

KK (c) = 5,70%

Lampiran 3. Tabel sidik ragam indeks luas daun bawang merah pada berbagai jenis bokashi dan dosis mikoriza pada umur 35 hst

| SK | db | JK | KT | F _{.Tabel} | | |
|-----------|-------|--------|-------|------------------------|-------|-------|
| | | | | F _{Hit} | 0,05 | 0,01 |
| Kelompok | 2 | 1,036 | 0,518 | 14,36749 ^{tn} | 19,00 | 99,00 |
| V | 1 | 0,004 | 0,004 | 0,12 ^{tn} | 18,51 | 98,49 |
| Galat (a) | 2 | 0,072 | 0,036 | | | |
| B | 3 | 6,560 | 2,187 | 13,04** | 3,49 | 5,95 |
| VB | 3 | 0,098 | 0,033 | 0,19 ^{tn} | 3,49 | 5,95 |
| Galat (b) | 12 | 2,012 | 0,168 | | | |
| M | 2 | 3,948 | 1,974 | 7,87** | 3,30 | 5,34 |
| VM | 2 | 0,108 | 0,054 | 0,2158 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 4,094 | 0,682 | 2,72* | 2,40 | 3,42 |
| VBM | 6 | 1,550 | 0,258 | 1,03 ^{tn} | 2,40 | 3,42 |
| Galat c) | 32 | 8,031 | 0,251 | | | |
| Total | 71 | 27,513 | | | | |
| KK (a) = | 5,21% | | | | | |
| KK (b) = | 7,81% | | | | | |
| KK (c) = | 6,32% | | | | | |

Lampiran 4. Tabel sidik ragam indeks luas daun bawang merah pada berbagai jenis bokashi dan dosis mikoriza pada umur 49 hst

| SK | db | JK | KT | F _{.Tabel} | | |
|-----------|-------|-------|-------|-----------------------|-------|-------|
| | | | | F _{Hit} | 0,05 | 0,01 |
| Kelompok | 2 | 0,291 | 0,146 | 3,74054 ^{tn} | 19,00 | 99,00 |
| V | 1 | 0,320 | 0,320 | 8,21 ^{tn} | 18,51 | 98,49 |
| Galat (a) | 2 | 0,078 | 0,039 | | | |
| B | 3 | 3,178 | 1,059 | 13,20** | 3,49 | 5,95 |
| VB | 3 | 0,056 | 0,019 | 0,23 ^{tn} | 3,49 | 5,95 |
| Galat (b) | 12 | 0,963 | 0,080 | | | |
| M | 2 | 1,886 | 0,943 | 32,03** | 3,30 | 5,34 |
| VM | 2 | 0,103 | 0,051 | 1,7463 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 0,371 | 0,062 | 2,10 ^{tn} | 2,40 | 3,42 |
| VBM | 6 | 0,430 | 0,071 | 2,47** | 2,40 | 3,42 |
| Galat c) | 32 | 0,942 | 0,029 | | | |
| Total | 71 | 8,250 | | | | |
| KK (a) = | 6,87% | | | | | |
| KK (b) = | 3,56% | | | | | |
| KK (c) = | 5,67% | | | | | |

Lampiran 5. Tabel sidik ragam laju tumbuh per tanaman bawang merah pada berbagai jenis bokashi dan dosis mikoriza pada umur 21 hst

| SK | db | JK | KT | F _{Hitung} | F _{·Tabel} | |
|-----------|----|---------|-----------|---------------------|---------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 0,00144 | 7,2E-04 | 0,158** | 19,00 | 99,00 |
| V | 1 | 0,00330 | 0,00330 | 49,00** | 18,51 | 98,49 |
| Galat (a) | 2 | 0,00907 | 4,535E-03 | | | |
| B | 3 | 0,00301 | 1,006E-03 | 40,77** | 3,49 | 5,95 |
| VB | 3 | 0,00693 | 2,311E-13 | 0,94 ^{tn} | 3,49 | 5,95 |
| Galat (b) | 12 | 0,00296 | 2,467E-13 | | | |
| M | 2 | 0,00213 | 1,067E-03 | 56,67** | 3,30 | 5,34 |
| VM | 2 | 0,00266 | 1,333E-03 | 7,08** | 3,30 | 5,34 |
| BM | 6 | 0,00514 | 8,577E-03 | 4,55** | 2,40 | 3,42 |
| VBM | 6 | 0,00685 | 1,142E-03 | 0,61 ^{tn} | 2,40 | 3,42 |
| Galat c) | 32 | 0,00602 | 1,883E-04 | | | |
| Total | 71 | 0,0714 | | | | |

KK (a) = 21,20%

KK (b) = 25,00%

KK (c) = 24,47%

Lampiran 6. Tabel sidik ragam laju tumbuh per tanaman bawang merah pada berbagai jenis bokashi dan dosis mikoriza pada umur 35 hst

| SK | db | JK | KT | F _{Hitung} | F _{·Tabel} | |
|-----------|----|--------|---------|---------------------|---------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 0,0283 | 0,0141 | 3,03 ^{tn} | 19,00 | 99,00 |
| V | 1 | 0,0632 | 0,0632 | 13,54 ^{tn} | 18,51 | 98,49 |
| Galat (a) | 2 | 0,0934 | 0,0467 | | | |
| B | 3 | 0,0964 | 0,0321 | 46,65** | 3,49 | 5,95 |
| VB | 3 | 0,0271 | 0,0090 | 13,14** | 3,49 | 5,95 |
| Galat (b) | 12 | 0,0827 | 0,0068 | | | |
| M | 2 | 0,0817 | 0,0408 | 94,70** | 3,30 | 5,34 |
| VM | 2 | 0,0157 | 0,00785 | 18,24** | 3,30 | 5,34 |
| BM | 6 | 0,0188 | 0,00311 | 7,27** | 2,40 | 3,42 |
| VBM | 6 | 0,0200 | 0,00333 | 7,76** | 2,40 | 3,42 |
| Galat c) | 32 | 0,0138 | 0,00043 | | | |
| Total | 71 | 0,2922 | | | | |

KK (a) = 16,28%

KK (b) = 19,77%

KK (c) = 15,65%

Lampiran 7. Tabel sidik ragam laju tumbuh per tanaman bawang merah pada berbagai jenis bokashi dan dosis mikoriza pada umur 49 hst

| SK | db | JK | KT | F _{Hitung} | F _{.Tabel} | |
|-----------|----|-----------|-------|---------------------|---------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 0,033 | 0,016 | 0,93 ^{tn} | 19,00 | 99,00 |
| V | 1 | 5,696 | 5,695 | 121,29** | 18,51 | 98,49 |
| Galat (a) | 2 | 0,035 | 0,017 | | | |
| B | 3 | 4,296 | 1,432 | 42,71** | 3,49 | 5,95 |
| VB | 3 | 0,265 | 0,088 | 2,63 ⁿ | 3,49 | 5,95 |
| Galat (b) | 12 | 0,402 | 0,033 | | | |
| M | 2 | 4,668 | 2,334 | 129,26** | 3,30 | 5,34 |
| VM | 2 | 0,634 | 0,317 | 17,56** | 3,30 | 5,34 |
| BM | 6 | 0,475 | 0,079 | 4,39** | 2,40 | 3,42 |
| VBM | 6 | 0,300 | 0,050 | 2,77* | 2,40 | 3,42 |
| Galat c) | 32 | 0,577 | 0,018 | | | |
| Total | 71 | 1,738E-04 | | | | |

KK (a) = 15,45%

KK (b) = 21,25%

KK c) = 15,59%

Lampiran 9. Tabel sidik ragam panjang akar tanaman bawang merah pada berbagai jenis bokashi dan dosis mikoriza

| SK | db | JK | KT | F _{Hitung} | F _{.Tabel} | |
|-----------|----|---------|--------|---------------------|---------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 2,999 | 1,499 | 0,88 ^{tn} | 19,00 | 99,00 |
| V | 1 | 27,454 | 27,454 | 16,12 ^{tn} | 18,51 | 98,49 |
| Galat (a) | 2 | 3,406 | 1,703 | | | |
| B | 3 | 215,364 | 71,788 | 16,92** | 3,49 | 5,95 |
| VB | 3 | 29,771 | 9,924 | 2,34 ^{tn} | 3,49 | 5,95 |
| Galat (b) | 12 | 50,926 | 4,244 | | | |
| M | 2 | 62,472 | 31,236 | 9,41** | 3,30 | 5,34 |
| VM | 2 | 7,927 | 3,964 | 1,19 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 23,756 | 3,959 | 1,19 ^{tn} | 2,40 | 3,42 |
| VBM | 6 | 16,941 | 2,824 | 0,85 ^{tn} | 2,40 | 3,42 |
| Galat c) | 32 | 106,177 | 3,318 | | | |
| Total | 71 | 547,193 | | | | |

KK (a) = 9,78%

KK (b) = 15,44%

KK (c) = 13,65%

Lampiran 10. Tabel sidik ragam CO₂ internal tanaman bawang merah pada berbagai jenis bokashi dan dosis mikoriza pada umur 21 hst

| SK | db | JK | KT | F _{Hitung} | F _{Tabel} | |
|-----------|----|-----------|----------|---------------------|--------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 7591,52 | 3795,76 | 4,78 ^{tn} | 19,00 | 99,00 |
| V | 1 | 5275,93 | 5275,93 | 6,64 ^{tn} | 18,51 | 98,49 |
| Galat (a) | 2 | 1589,58 | 794,79 | | | |
| B | 3 | 53155,70 | 17718,57 | 12,26** | 3,49 | 5,95 |
| VB | 3 | 9346,72 | 3115,57 | 2,16 ^{tn} | 3,49 | 5,95 |
| Galat (b) | 12 | 17337,72 | 1444,81 | | | |
| M | 2 | 131856,70 | 65928,35 | 37,49** | 3,30 | 5,34 |
| VM | 2 | 7449,29 | 3724,64 | 2,12 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 25310,86 | 4218,48 | 2,40 ^{tn} | 2,40 | 3,42 |
| VBM | 6 | 15412,61 | 2568,77 | 1,46 ^{tn} | 2,40 | 3,42 |
| Galat c) | 32 | 56272,51 | 1758,52 | | | |
| Total | 71 | 330599,13 | | | | |

KK (a) = 13,38%

KK (b) = 18,04%

KK (c) = 19,90%

Lampiran 11. Tabel sidik ragam CO₂ internal tanaman bawang merah pada berbagai jenis bokashi dan dosis mikoriza pada umur 42 hst

| SK | db | JK | KT | F _{Hit} | F _{Tabel} | |
|-----------|----|-----------|-----------|--------------------|--------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 20964,83 | 10482,41 | 0,68 ^{tn} | 19,00 | 99,00 |
| V | 1 | 665127,33 | 665127,33 | 43,14* | 18,51 | 98,49 |
| Galat (a) | 2 | 30839,18 | 15419,59 | | | |
| B | 3 | 75502,26 | 25167,42 | 3,14 ^{tn} | 3,49 | 5,95 |
| VB | 3 | 69910,46 | 23303,49 | 2,91 ^{tn} | 3,49 | 5,95 |
| Galat (b) | 12 | 96172,52 | 8014,38 | | | |
| M | 2 | 520579,74 | 260289,87 | 40,60** | 3,30 | 5,34 |
| VM | 2 | 22923,60 | 11461,80 | 1,79 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 238983,27 | 39830,54 | 6,21** | 2,40 | 3,42 |
| VBM | 6 | 121587,00 | 20264,50 | 3,16* | 2,40 | 3,42 |
| Galat c) | 32 | 205135,98 | 6410,50 | | | |
| Total | 71 | 20964,83 | | | | |

KK (a) = 20,19%

KK (b) = 14,56%

KK (c) = 13,02%

Lampiran 12. Tabel sidik ragam CO₂ internal tanaman bawang merah pada berbagai jenis bokashi dan dosis mikoriza pada umur 63 hst

| SK | db | JK | KT | F _{Hitung} | F _{Tabel} | |
|-----------|----|-----------|----------|---------------------|--------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 31019,38 | 15509,69 | 13,82 ^{tn} | 19,00 | 99,00 |
| V | 1 | 1625,93 | 1625,93 | 1,45 ^{tn} | 18,51 | 98,49 |
| Galat (a) | 2 | 2243,82 | 1121,91 | | | |
| B | 3 | 44075,27 | 14691,76 | 7,71 ^{**} | 3,49 | 5,95 |
| VB | 3 | 2490,19 | 830,06 | 0,44 ^{tn} | 3,49 | 5,95 |
| Galat (b) | 12 | 22852,43 | 1904,37 | | | |
| M | 2 | 52330,25 | 26165,13 | 21,82 ^{**} | 3,30 | 5,34 |
| VM | 2 | 1568,77 | 784,39 | 0,65 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 15223,82 | 2537,30 | 2,12 ^{tn} | 2,40 | 3,42 |
| VBM | 6 | 2673,27 | 445,55 | 0,37 ^{tn} | 2,40 | 3,42 |
| Galat c) | 32 | 38374,44 | 1199,20 | | | |
| Total | 71 | 214477,57 | | | | |

KK (a) = 14,82%

KK (b) = 19,30%

KK (c) = 15,32%

Lampiran 13. Tabel sidik ragam konduktan stomata tanaman bawang merah pada berbagai jenis bokashi dan dosis mikoriza pada umur 21 hst

| SK | db | JK | KT | F _{Hit} | F _{Tabel} | |
|-----------|----|----------|---------|---------------------|--------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 185,74 | 92,87 | 0,53 ^{tn} | 19,00 | 99,00 |
| V | 1 | 2055,47 | 2055,47 | 11,63 ^{tn} | 18,51 | 98,49 |
| Galat (a) | 2 | 353,56 | 176,78 | | | |
| B | 3 | 1066,09 | 355,36 | 4,17 [*] | 3,49 | 5,95 |
| VB | 3 | 180,42 | 60,14 | 0,71 ^{tn} | 3,49 | 5,95 |
| Galat (b) | 12 | 1023,68 | 85,31 | | | |
| M | 2 | 8914,30 | 4457,15 | 65,98 ^{**} | 3,30 | 5,34 |
| VM | 2 | 412,59 | 206,30 | 3,05 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 655,90 | 109,32 | 1,62 ^{tn} | 2,40 | 3,42 |
| VBM | 6 | 782,35 | 130,39 | 1,93 ^{tn} | 2,40 | 3,42 |
| Galat c) | 32 | 2161,75 | 67,55 | | | |
| Total | 71 | 17791,87 | | | | |

KK (a) = 19,67%

KK (b) = 13,66%

KK (c) = 12,16%

Lampiran 14. Tabel sidik ragam konduktan stomata tanaman bawang merah pada berbagai jenis bokashi dan dosis mikoriza pada umur 42 hst

| SK | db | JK | KT | F _{Hit} | F _{•Tabel} | |
|-----------|----|----------|----------|--------------------|---------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 42,17 | 21,08 | 0,13 ^{tn} | 19,00 | 99,00 |
| V | 1 | 12848,05 | 12848,05 | 81,57* | 18,51 | 98,49 |
| Galat (a) | 2 | 315,01 | 157,50 | | | |
| B | 3 | 2843,93 | 947,98 | 5,45* | 3,49 | 5,95 |
| VB | 3 | 1489,44 | 496,48 | 2,85 ^{tn} | 3,49 | 5,95 |
| Galat (b) | 12 | 2088,87 | 174,07 | | | |
| M | 2 | 4311,84 | 2155,92 | 14,17** | 3,30 | 5,34 |
| VM | 2 | 79,27 | 39,63 | 0,26 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 467,72 | 77,95 | 0,51 ^{tn} | 2,40 | 3,42 |
| VBM | 6 | 1062,95 | 177,16 | 1,16 ^{tn} | 2,40 | 3,42 |
| Galat (c) | 32 | 4869,27 | 152,16 | | | |
| Total | 71 | 30418,50 | | | | |

KK (a) = 20,65%

KK (b) = 21,71%

KK (c) = 20,29%

Lampiran 15. Tabel sidik ragam konduktan stomata tanaman bawang merah pada berbagai jenis bokashi dan dosis mikoriza pada umur 63 hst

| SK | db | JK | KT | F _{Hitung} | F _{•Tabel} | |
|-----------|----|----------|---------|---------------------|---------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 20,84 | 10,42 | 0,31 ^{tn} | 19,00 | 99,00 |
| V | 1 | 3266,34 | 3266,34 | 97,37* | 18,51 | 98,49 |
| Galat (a) | 2 | 67,09 | 33,55 | | | |
| B | 3 | 3707,38 | 1235,79 | 199,19** | 3,49 | 5,95 |
| VB | 3 | 1089,70 | 363,23 | 58,55** | 3,49 | 5,95 |
| Galat (b) | 12 | 74,45 | 6,20 | | | |
| M | 2 | 4695,35 | 2347,67 | 249,50** | 3,30 | 5,34 |
| VM | 2 | 2380,60 | 1190,30 | 126,50** | 3,30 | 5,34 |
| BM | 6 | 1727,60 | 287,93 | 30,60** | 2,40 | 3,42 |
| VBM | 6 | 1936,63 | 322,77 | 34,30** | 2,40 | 3,42 |
| Galat (c) | 32 | 301,10 | 9,41 | | | |
| Total | 71 | 19267,08 | | | | |

KK (a) = 6,74%

KK (b) = 7,20%

KK (c) = 8,86%

Lampiran 16. Tabel sidik ragam fotosintesis tanaman bawang merah pada berbagai jenis bokashi dan dosis mikoriza pada umur 21 hst

| SK | db | JK | KT | F _{Hitung} | F _{•Tabel} | |
|-----------|----|--------|--------|---------------------|---------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 6,23 | 3,12 | 2,83 ^{tn} | 19,00 | 99,00 |
| V | 1 | 128,43 | 128,43 | 116,59** | 18,51 | 98,49 |
| Galat (a) | 2 | 2,20 | 1,10 | | | |
| B | 3 | 87,44 | 29,15 | 5,70* | 3,49 | 5,95 |
| VB | 3 | 29,92 | 9,97 | 1,95 ^{tn} | 3,49 | 5,95 |
| Galat (b) | 12 | 61,40 | 5,12 | | | |
| M | 2 | 347,18 | 173,59 | 46,55** | 3,30 | 5,34 |
| VM | 2 | 23,76 | 11,88 | 3,19 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 39,89 | 6,65 | 1,78 ^{tn} | 2,40 | 3,42 |
| VBM | 6 | 37,85 | 6,31 | 1,69 ^{tn} | 2,40 | 3,42 |
| Galat c) | 32 | 119,33 | 3,73 | | | |
| Total | 71 | 883,63 | | | | |

KK (a) = 9,80%

KK (b) = 21,13%

KK c) = 18,04%

Lampiran 17. Tabel sidik ragam fotosintesis tanaman bawang merah pada berbagai jenis bokashi dan dosis mikoriza pada umur 42 hst

| SK | db | JK | KT | F _{Hitung} | F _{•Tabel} | |
|-----------|----|----------|---------|---------------------|---------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 188,76 | 94,38 | 137,59** | 19,00 | 99,00 |
| V | 1 | 2040,65 | 2040,65 | 2974,87** | 18,51 | 98,49 |
| Galat (a) | 2 | 1,37 | 0,69 | | | |
| B | 3 | 2308,81 | 769,60 | 20,34** | 3,49 | 5,95 |
| VB | 3 | 855,41 | 285,14 | 7,53** | 3,49 | 5,95 |
| Galat (b) | 12 | 454,11 | 37,84 | | | |
| M | 2 | 3909,98 | 1954,99 | 119,21** | 3,30 | 5,34 |
| VM | 2 | 2007,63 | 1003,81 | 61,21** | 3,30 | 5,34 |
| BM | 6 | 747,74 | 124,62 | 7,60** | 2,40 | 3,42 |
| VBM | 6 | 1206,95 | 201,16 | 12,27** | 2,40 | 3,42 |
| Galat c) | 32 | 524,80 | 16,40 | | | |
| Total | 71 | 14246,21 | | | | |

KK (a) = 2,67%

KK (b) = 19,81%

KK (c) = 13,04%

Lampiran 18. Tabel sidik ragam fotosintesis tanaman bawang merah pada berbagai jenis bokashi dan dosis mikoriza pada umur 63 hst

| SK | db | JK | KT | F _{Hitung} | F _{Tabel} | |
|-----------|----|---------|--------|---------------------|--------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 45,60 | 22,80 | 6,09 ^{tn} | 19,00 | 99,00 |
| V | 1 | 25,64 | 25,64 | 6,85 ^{tn} | 18,51 | 98,49 |
| Galat (a) | 2 | 7,49 | 3,74 | | | |
| B | 3 | 1463,37 | 487,79 | 158,20** | 3,49 | 5,95 |
| VB | 3 | 67,83 | 22,61 | 7,33** | 3,49 | 5,95 |
| Galat (b) | 12 | 37,00 | 3,08 | | | |
| M | 2 | 1041,03 | 520,51 | 94,53** | 3,30 | 5,34 |
| VM | 2 | 28,34 | 14,17 | 2,57 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 718,81 | 119,80 | 21,76** | 2,40 | 3,42 |
| VBM | 6 | 53,45 | 8,91 | 1,62 ^{tn} | 2,40 | 3,42 |
| Galat c) | 32 | 176,20 | 5,51 | | | |
| Total | 71 | 3664,77 | | | | |

KK (a) = 16,39%

KK (b) = 14,87%

KK (c) = 19,87%

Lampiran 19. Tabel sidik ragam laju transpirasi tanaman bawang merah pada berbagai jenis bokashi dan dosis mikoriza pada umur 21 hst

| SK | db | JK | KT | F _{Hitung} | F _{Tabel} | |
|-----------|----|------|------|----------------------|--------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 4,54 | 2,27 | 12,63 ^{tn} | 19,00 | 99,00 |
| V | 1 | 0,00 | 0,00 | 0,0048 ^{tn} | 18,51 | 98,49 |
| Galat (a) | 2 | 0,36 | 0,18 | | | |
| B | 3 | 0,81 | 0,27 | 2,00 ^{tn} | 3,49 | 5,95 |
| VB | 3 | 0,27 | 0,09 | 0,66 ^{tn} | 3,49 | 5,95 |
| Galat (b) | 12 | 1,61 | 0,13 | | | |
| M | 2 | 1,78 | 0,89 | 7,71** | 3,30 | 5,34 |
| VM | 2 | 0,74 | 0,37 | 3,22 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 0,21 | 0,04 | 0,30 ^{tn} | 2,40 | 3,42 |
| VBM | 6 | 0,33 | 0,06 | 0,48 ^{tn} | 2,40 | 3,42 |
| Galat c) | 32 | 3,69 | 0,12 | | | |
| Total | 71 | 4,54 | 2,27 | | | |

KK (a) = 21,68%

KK (b) = 18,76%

KK (c) = 17,37%

Lampiran 20. Tabel sidik ragam laju transpirasi tanaman bawang merah pada berbagai jenis bokashi dan dosis mikoriza pada umur 42 hst

| SK | db | JK | KT | F _{Hitung} | F _{.Tabel} | |
|-----------|----|-------|-------|---------------------|---------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 1,65 | 0,82 | 5,43 ^{tn} | 19,00 | 99,00 |
| V | 1 | 11,95 | 11,95 | 78,71* | 18,51 | 98,49 |
| Galat (a) | 2 | 0,30 | 0,15 | | | |
| B | 3 | 2,21 | 0,74 | 2,85 ^{tn} | 3,49 | 5,95 |
| VB | 3 | 0,39 | 0,13 | 0,50 ^{tn} | 3,49 | 5,95 |
| Galat (b) | 12 | 3,10 | 0,26 | | | |
| M | 2 | 3,47 | 1,74 | 17,42** | 3,30 | 5,34 |
| VM | 2 | 0,21 | 0,10 | 1,05 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 0,82 | 0,14 | 1,36 ^{tn} | 2,40 | 3,42 |
| VBM | 6 | 0,37 | 0,06 | 0,62 ^{tn} | 2,40 | 3,42 |
| Galat c) | 32 | 3,19 | 0,10 | | | |
| Total | 71 | 27,64 | | | | |

KK (a) = 16,45%

KK (b) = 21,45%

KK c) = 13,32%

Lampiran 21. Tabel sidik ragam laju transpirasi tanaman bawang merah pada berbagai jenis bokashi dan dosis mikoriza pada umur 63 hst

| SK | db | JK | KT | F _{Hit} | F _{.Tabel} | |
|-----------|----|--------|-------|--------------------|---------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 0,73 | 0,36 | 0,90 ^{tn} | 19,00 | 99,00 |
| V | 1 | 2,46 | 2,46 | 6,07 ^{tn} | 18,51 | 98,49 |
| Galat (a) | 2 | 0,81 | 0,41 | | | |
| B | 3 | 11,20 | 3,73 | 38,03** | 3,49 | 5,95 |
| VB | 3 | 2,66 | 0,89 | 9,03** | 3,49 | 5,95 |
| Galat (b) | 12 | 1,18 | 0,10 | | | |
| M | 2 | 40,62 | 20,31 | 134,30** | 3,30 | 5,34 |
| VM | 2 | 11,76 | 5,88 | 38,89** | 3,30 | 5,34 |
| BM | 6 | 14,71 | 2,45 | 16,21** | 2,40 | 3,42 |
| VBM | 6 | 19,26 | 3,21 | 21,22** | 2,40 | 3,42 |
| Galat c) | 32 | 4,84 | 0,15 | | | |
| Total | 71 | 110,23 | | | | |

KK (a) = 18,43%

KK (b) = 9,07%

KK c) = 11,26%

Lampiran 22. Tabel sidik ragam jumlah umbi per rumpun tanaman bawang merah pada berbagai jenis bokashi dan dosis mikoriza

| SK | db | JK | KT | F _{Hitung} | F _{•Tabel} | |
|-----------|----|--------|--------|----------------------|---------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 1,41 | 0,70 | 0,51 ^{tn} | 19,00 | 99,00 |
| V | 1 | 154,29 | 154,29 | 111,46** | 18,51 | 98,49 |
| Galat (a) | 2 | 2,77 | 1,38 | | | |
| B | 3 | 71,35 | 23,78 | 112,02** | 3,49 | 5,95 |
| VB | 3 | 13,94 | 4,65 | 21,88** | 3,49 | 5,95 |
| Galat (b) | 12 | 2,55 | 0,21 | | | |
| M | 2 | 10,69 | 5,34 | 20,15** | 3,30 | 5,34 |
| VM | 2 | 0,34 | 0,17 | 0,6417 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 12,56 | 2,09 | 7,89** | 2,40 | 3,42 |
| VBM | 6 | 4,30 | 0,72 | 2,71* | 2,40 | 3,42 |
| Galat (c) | 32 | 8,48 | 0,27 | | | |
| Total | 71 | 282,68 | | | | |

KK (a) = 12,13%

KK (b) = 8,67%

KK (c) = 9,68%

Lampiran 23. Tabel sidik ragam diameter umbi tanaman bawang merah pada berbagai jenis bokashi dan dosis mikoriza

| SK | db | JK | KT | F _{Hit} | F _{•Tabel} | |
|-----------|----|--------|--------|--------------------|---------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 0,131 | 0,065 | 5,12 ^{tn} | 19,00 | 99,00 |
| V | 1 | 19,772 | 19,772 | 1545,49** | 18,51 | 98,49 |
| Galat (a) | 2 | 0,026 | 0,013 | | | |
| B | 3 | 5,147 | 1,716 | 37,14** | 3,49 | 5,95 |
| VB | 3 | 0,577 | 0,192 | 4,16* | 3,49 | 5,95 |
| Galat (b) | 12 | 0,554 | 0,046 | | | |
| M | 2 | 2,723 | 1,362 | 20,25** | 3,30 | 5,34 |
| VM | 2 | 0,141 | 0,070 | 1,05 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 0,296 | 0,049 | 0,73 ^{tn} | 2,40 | 3,42 |
| VBM | 6 | 1,015 | 0,169 | 2,52* | 2,40 | 3,42 |
| Galat (c) | 32 | 2,152 | 0,067 | | | |
| Total | 71 | 32,533 | | | | |

KK (a) = 0,057%

KK (b) = 0,108%

KK (c) = 0,130%

Lampiran 24. Tabel sidik ragam bobot kering umbi per rumpun tanaman bawang merah pada berbagai jenis bokashi dan dosis mikoriza

| SK | db | JK | KT | F _{Hit} | F _{•Tabel} | |
|-----------|----|---------|---------|--------------------|---------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 32,03 | 16,01 | 2,03 ^{tn} | 19,00 | 99,00 |
| V | 1 | 751,88 | 751,88 | 95,50* | 18,51 | 98,49 |
| Galat (a) | 2 | 15,74 | 7,87 | | | |
| B | 3 | 3476,81 | 1158,93 | 102,20** | 3,49 | 5,95 |
| VB | 3 | 160,84 | 53,61 | 4,73* | 3,49 | 5,95 |
| Galat (b) | 12 | 136,07 | 11,33 | | | |
| M | 2 | 2419,70 | 1209,85 | 130,97** | 3,30 | 5,34 |
| VM | 2 | 36,58 | 18,29 | 1,98 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 435,57 | 72,59 | 7,86** | 2,40 | 3,42 |
| VBM | 6 | 137,94 | 22,99 | 2,49* | 2,40 | 3,42 |
| Galat c) | 32 | 295,61 | 9,23 | | | |
| Total | 71 | 7898,80 | | | | |

KK (a) = 10,54%

KK (b) = 12,65%

KK c) = 11,42%

Lampiran 25. Tabel sidik ragam bobot kering umbi per petak tanaman bawang merah pada berbagai jenis bokashi dan dosis mikoriza

| SK | db | JK | KT | F _{Hit} | F _{•Tabel} | |
|-----------|----|------------|--------|--------------------|---------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 0,601 | 0,300 | 1,75 ^{tn} | 19,00 | 99,00 |
| V | 1 | 13,308 | 13,308 | 77,59* | 18,51 | 98,49 |
| Galat (a) | 2 | 0,343 | 0,171 | | | |
| B | 3 | 46,804 | 15,601 | 131,59** | 3,49 | 5,95 |
| VB | 3 | 1,068 | 0,356 | 3,00 ^{tn} | 3,49 | 5,95 |
| Galat (b) | 12 | 1,422 | 0,118 | | | |
| M | 2 | 35,094 | 17,547 | 192,94** | 3,30 | 5,34 |
| VM | 2 | 0,524 | 0,262 | 2,88 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 6,950 | 1,158 | 12,74** | 2,40 | 3,42 |
| VBM | 6 | 1,362 | 0,227 | 2,50* | 2,40 | 3,42 |
| Galat c) | 32 | 2,910 | 0,090 | | | |
| Total | 71 | 110,391933 | | | | |

KK (a) = 13,66%

KK (b) = 11,36%

KK (c) = 9,95%

Lampiran 26. Tabel sidik ragam bobot kering umbi per Hektar tanaman bawang merah pada berbagai jenis bokashi dandosis mikoriza

| SK | db | JK | KT | F _{Hit} | F _{Tabel} | |
|-----------|----|---------|--------|--------------------|--------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 1,671 | 0,835 | 1,75 ^{tn} | 19,00 | 99,00 |
| V | 1 | 36,968 | 36,968 | 77,59* | 18,51 | 98,49 |
| Galat (a) | 2 | 0,952 | 0,476 | | | |
| B | 3 | 130,012 | 43,337 | 131,59** | 3,49 | 5,95 |
| VB | 3 | 2,968 | 0,989 | 3,00 ^{tn} | 3,49 | 5,95 |
| Galat (b) | 12 | 3,952 | 0,329 | | | |
| M | 2 | 97,484 | 48,742 | 192,94** | 3,30 | 5,34 |
| VM | 2 | 1,457 | 0,728 | 2,88 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 19,306 | 3,217 | 12,74** | 2,40 | 3,42 |
| VBM | 6 | 3,785 | 0,630 | 2,50* | 2,40 | 3,42 |
| Galat (c) | 32 | 8,084 | 0,252 | | | |
| Total | 71 | 306,644 | | | | |

KK (a) = 13,66%

KK (b) = 11,36%

KK (c) = 9,95%

Lampiran 27. Analisis Tanah Sebelum Penelitian

| No | Parameter | Hasil | Kriteria |
|----|---|-------|------------|
| 1 | pH H ₂ O 1:2.5 | 6,64 | Agak masam |
| 2 | C-Organik (%) | 1,98 | Rendah |
| 3 | N - Total | 0,11 | Rendah |
| 4 | P ₂ O ₅ -tersedia (ppm) | 12,14 | Rendah |
| 5 | KTK (cmol/kg) | 22,67 | Rendah |
| 6 | K (cmol/kg) | 0,245 | Rendah |
| 7 | Na (cmol/kg) | 0,182 | Rendah |
| 8 | Ca (cmol/kg) | 5,57 | Sedang |
| 9 | Mg (cmo/kg) | 3,82 | Sedang |
| 10 | Al-dd (cmol/kg) | 0,20 | Rendah |
| 11 | SO ₄ (ppm) | 0,146 | Rendah |

Sumber : Laboratorium Kimia dan Fisika Tanah Fakultas Pertanian dan Kehutanan UNHAS, Agustus 2004.

Lampiran 28. Analisis tanah setelah percobaan

| No | Parameter | bom1 | Bom2 | b1m1 | b1m2 | b2m1 | b2m2 | b3m1 | b3m2 |
|----|---|-------|-------|-------|-------|-------|-------|-------|--------|
| 1 | pH H ₂ O 1:2.5 | 6,16 | 6,32 | 6,24 | 5,84 | 6,32 | 6,28 | 6,15 | 6,42 |
| 2 | C-Organik (%) | 1,98 | 1,97 | 3,12 | 3,11 | 4,14 | 4,13 | 3,12 | 3,15 |
| 3 | N - Total | 0,11 | 0,10 | 0,32 | 0,33 | 0,54 | 0,54 | 0,42 | 0,42 |
| 4 | P ₂ O ₅ -tersedia (ppm) | 17,84 | 18,26 | 21,47 | 23,24 | 24,32 | 25,47 | 21,33 | 22,27 |
| 5 | KTK (cmol/kg) | 19,67 | 19,92 | 22,32 | 23,42 | 24,32 | 24,56 | 22,13 | 22, 47 |
| 6 | K (cmol/kg) | 4,52 | 4,12 | 5,24 | 5,56 | 6, 42 | 6, 52 | 6,33 | 6,11 |
| 7 | Na (cmol/kg) | 2,22 | 2,32 | 3,10 | 3,11 | 3,46 | 3,56 | 3,16 | 3,21 |
| 8 | Ca (cmol/kg) | 5,11 | 5,23 | 5,66 | 5,16 | 6,31 | 6,32 | 7,46 | 7,34 |
| 9 | Mg (cmo/kg) | 3,25 | 3,24 | 4,25 | 4,26 | 4,31 | 4,33 | 5,35 | 5,39 |
| 10 | SO ₄ (ppm) | 12,56 | 10,48 | 17,97 | 16,78 | 24,21 | 24,32 | 19,1 | 18,38 |

Sumber : Laboratorium Kimia dan Fisika Tanah Fakultas Pertanian dan Kehutanan UNHAS, Agustus 2004

Lampiran 29. Analisis tanah setelah percobaan untuk b2m1 dan b2m2

| Parameter | b2m1 | b2m2 | Kriteria |
|---|-------|-------|---------------|
| pH H ₂ O 1:2.5 | 6,32 | 6,28 | Agak masam |
| C-Organik (%) | 4,14 | 4,13 | Sedang |
| N - Total | 0,54 | 0,54 | Sedang |
| P ₂ O ₅ -tersedia (ppm) | 24,32 | 25,47 | Tinggi |
| KTK (cmol/kg) | 24,32 | 24,56 | Tinggi |
| K (cmol/kg) | 6, 42 | 6, 52 | Sangat tinggi |
| Na (cmol/kg) | 3,46 | 3,56 | Tinggi |
| Ca (cmol/kg) | 6,31 | 6,32 | Sedang |
| Mg (cmo/kg) | 4,31 | 4,33 | Sedang |
| SO ₄ (ppm) | 24,21 | 24,32 | Sangat Tinggi |

Tabel 30. Analisis Bokashi jerami, Bokashi Pupuk Kandang Kambing dan Kulit Tanduk Kopi

| No | Parameter | Bokashi Jerami | Bokashi Pk. Kambing | Bokashi kt. Kopi |
|----|---|----------------|---------------------|------------------|
| 1 | pH H ₂ O 1:2.5 | 8,24 | 8,51 | 7,98 |
| 2 | C-Organik (%) | 7,24 | 9,71 | 7,85 |
| 3 | N – Total (%) | 0,21 | 1,26 | 0,49 |
| 4 | C/N | 34,5 | 7,70 | 16,02 |
| 5 | P ₂ O ₅ -tersedia (%) | 1,23 | 0,62 | 0,27 |
| 6 | KTK (%) | 56,64 | 67,21 | 48,78 |
| 7 | K (%) | 0,37 | 1,20 | 2,26 |
| 8 | Na (%) | 0,25 | 0,38 | 0,40 |
| 9 | Ca (%) | 1,42 | 1,67 | 2,95 |
| 10 | Mg (%) | 0,54 | 0,42 | 2,25 |
| 11 | SO ₄ (%) | 0,20 | 0,34 | 0,25 |

Sumber : Laboratorium Kimia dan Fisika Tanah Fakultas Pertanian dan Kehutanan UNHAS, Agustus 2004.

Deskripsi Varietas Bawang merah

Varietas Bima

| | |
|---|-----------------------------|
| Umur panen | : 60-70 hari, |
| Hasil umbi kering | : 10 ton ha ⁻¹ , |
| Warna daun | : hijau, |
| Bentuk daun | : Silendris berlubang |
| Jumlah daun | : 14 – 50 helai |
| Warna bunga | : Putih |
| Bentuk Bunga | : Seperti Payung |
| Jumlah anakan | : 6-11 umbi |
| Bentuk biji | : Bulat gepeng berkeriput |
| Warna Biji | : Hitam |
| Bentuk umbi | : lonjong |
| Warna umbi | : merah |
| Ketahanan terhadap Penyakit | : Tahan penyakit busuk umbi |
| Adaptasi lingkungan sempit (Cocok didataran rendah) | |

(Rahmat R, 1994: Ambarwati dan Yudono,2003)

Varietas Probolingo

| | |
|-------------------|---------------------------|
| Umur panen | : 60-70 hari |
| Hasil umbi kering | : 12 ton ha ⁻¹ |
| Warna daun | : hijau tua |
| jumlah daun | : 16-30 helai |
| Warna bunga | : Putih |
| Bentuk Bunga | : Seperti Payung |
| Bentuk umbi | : bulat |
| Warna umbi | : merah muda |
| Jumlah anakan | : 5-7 umbi |

Adaptasi lingkungan yang luas (Ambarwati dan Yudono,2003)

Lampiran 6. Tabel sidik ragam indeks luas daun bawang merah pada berbagai jenis bokashi dan dosis mikoriza pada umur 21 hst

| SK | db | JK | KT | F _{Hit} | F _{Tabel} | |
|-----------|----|---------|---------|-----------------------|--------------------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 0,00100 | 0,00050 | 0,76597 ^{tn} | 19,00 | 99,00 |
| V | 1 | 0,00016 | 0,00016 | 0,24 ^{tn} | 18,51 | 98,49 |
| Galat (a) | 2 | 0,00129 | 0,00064 | | | |
| B | 3 | 1,95805 | 0,65268 | 1691,75 ^{**} | 3,49 | 5,95 |
| VB | 3 | 0,00060 | 0,00020 | 0,52 ^{tn} | 3,49 | 5,95 |
| Galat (b) | 12 | 0,00464 | 0,00039 | | | |
| M | 2 | 0,04498 | 0,02249 | 54,48 ^{**} | 3,30 | 5,34 |
| VM | 2 | 0,00007 | 0,00003 | 0,0803 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 0,01873 | 0,00312 | 7,57 ^{**} | 2,40 | 3,42 |
| VBM | 6 | 0,00163 | 0,00027 | 0,66 ^{tn} | 2,40 | 3,42 |
| Galat c) | 32 | 0,01321 | 0,00041 | | | |
| Total | 71 | 2,04436 | | | | |

KK (a) = 9,38%
 KK (b) = 6,53%
 KK (c) = 5,70%

Lampiran 7. Tabel sidik ragam indeks luas daun bawang merah pada berbagai jenis bokashi dan dosis mikoriza pada umur 35 hst

| SK | db | JK | KT | F _{Hit} | F.Tabel | |
|-----------|----|--------|-------|---------------------|---------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 1,036 | 0,518 | 14,49 ^{tn} | 19,00 | 99,00 |
| V | 1 | 0,004 | 0,004 | 0,12 ^{tn} | 18,51 | 98,49 |
| Galat (a) | 2 | 0,072 | 0,036 | | | |
| B | 3 | 6,560 | 2,187 | 13,02** | 3,49 | 5,95 |
| VB | 3 | 0,098 | 0,033 | 0,20 ^{tn} | 3,49 | 5,95 |
| Galat (b) | 12 | 2,012 | 0,168 | | | |
| M | 2 | 3,948 | 1,974 | 7,84** | 3,30 | 5,34 |
| VM | 2 | 0,108 | 0,054 | 0,26 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 4,094 | 0,682 | 2,72* | 2,40 | 3,42 |
| VBM | 6 | 1,550 | 0,258 | 1,03 ^{tn} | 2,40 | 3,42 |
| Galat c) | 32 | 8,031 | 0,251 | | | |
| Total | 71 | 27,513 | | | | |

KK (a) = 5,21%
 KK (b) = 7,81%
 KK (c) = 6,32%

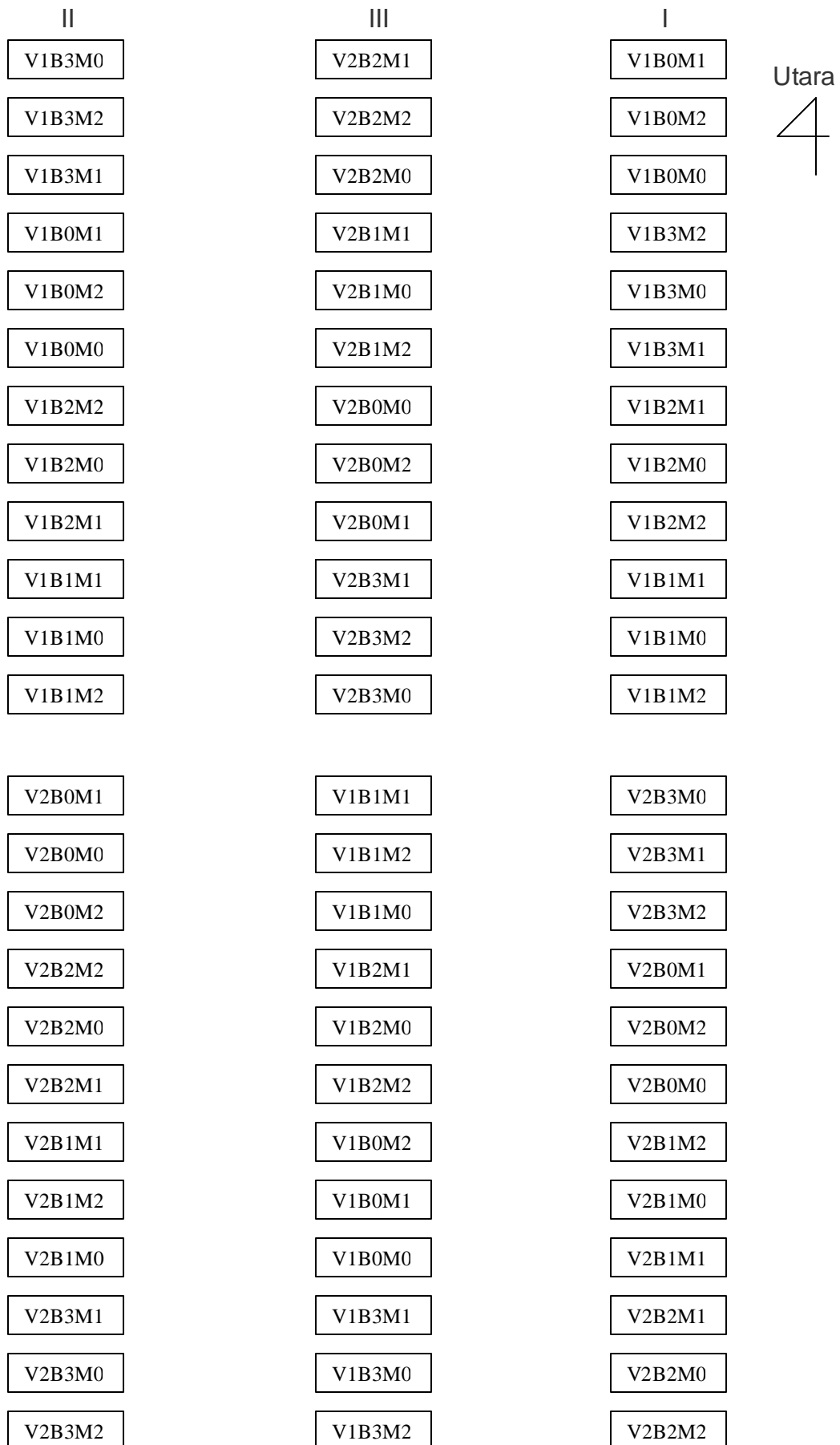
Lampiran 8. Tabel sidik ragam indeks luas daun bawang merah pada berbagai jenis bokashi dan dosis mikoriza pada umur 49 hst

| SK | db | JK | KT | F _{Hit} | F.Tabel | |
|-----------|----|-------|-------|--------------------|---------|-------|
| | | | | | 0,05 | 0,01 |
| Kelompok | 2 | 0,291 | 0,146 | 3,74 ^{tn} | 19,00 | 99,00 |
| V | 1 | 0,320 | 0,320 | 8,21 ^{tn} | 18,51 | 98,49 |
| Galat (a) | 2 | 0,078 | 0,039 | | | |
| B | 3 | 3,178 | 1,059 | 13,20** | 3,49 | 5,95 |
| VB | 3 | 0,056 | 0,019 | 0,23 ^{tn} | 3,49 | 5,95 |
| Galat (b) | 12 | 0,963 | 0,080 | | | |
| M | 2 | 1,886 | 0,943 | 32,03** | 3,30 | 5,34 |
| VM | 2 | 0,103 | 0,051 | 1,75 ^{tn} | 3,30 | 5,34 |
| BM | 6 | 0,371 | 0,062 | 2,10 ^{tn} | 2,40 | 3,42 |
| VBM | 6 | 0,062 | 0,010 | 0,35 ^{tn} | 2,40 | 3,42 |
| Galat c) | 32 | 0,942 | 0,029 | | | |
| Total | 71 | 8,250 | | | | |

KK (a) = 6,87%

KK (b) = 3,56%

KK (c) = 5,67%



Gambar 1 . Lay Out Percobaan di Lapangan

ANALISIS EKONOMI

Lama usaha : 1 musim tanam (± 2 bulan)
 Luas lahan : 1 ha
 Varietas : Probolinggo
 Jarak tanam : 0,20 x 0,25 m
 Jumlah populasi : 200.000 tanaman
 Dosis Mikoriza : 3 g per tanaman

| | | |
|-------------------------|---|--------------------------|
| a. Produksi | : 9,75 ton ha ⁻¹ | |
| b. Penerimaan | : Harga bawang merah organik Rp 12.000,00/kg | Rp 117.000.000,00 |
| c. Biaya tenaga kerja | | |
| - Pengolahan tanah | 50 HKP @ Rp 20.000,00 | Rp 1.000.000,00 |
| - Penanaman | 50 HKW @ Rp 15.000,00 | Rp 750.000,00 |
| - Pemupukan | 1 kali 15 HKP @ Rp 20.000,00 | Rp 300.000,00 |
| - Pemeliharaan | | Rp 3.600.000,00 |
| - Penyemprotan | 6 kali 15 HKP @ Rp 20.000,00 | Rp 1.800.000,00 |
| - Panen dan Pasca panen | 30 HKW + 10 HKP | Rp 650.000,00 |
| | <hr style="border: 0.5px solid black;"/> Jumlah | Rp 8.100.000,00 |
| d. Sarana produksi | | |
| - Bibit | 1.000 kg @Rp 11.000,00 | Rp 11.000.000,00 |
| - Bokashi pupuk kandang | 10.000 kg @ Rp 300,00 | Rp 3.000.000,00 |
| - Biopestisida | | Rp 3.000.000,00 |
| - Pupuk | | |
| o Urea | 100 kg @ Rp 15.000,00 | Rp 150.000,00 |
| o SP-36 | 150 kg @ Rp 2.500,00 | Rp 375.000,00 |
| o KCl | 100 kg @ Rp 2.500,00 | Rp 250.000,00 |
| - Mikoriza | 600 kg @ 30.000,00 | Rp 18.000.000,00 |
| | <hr style="border: 0.5px solid black;"/> Jumlah | Rp 35.775.000,00 |
| e. Biaya lain | | |
| - Sewa lahan | | Rp 1.500.000,00 |
| - Sewa alat olah tanah | | Rp 1.000.000,00 |
| - Biaya tak terduga | | Rp 1.000.000,00 |
| | <hr style="border: 0.5px solid black;"/> Jumlah | Rp 3.500.000,00 |

f. Total biaya (c + d + e) = Rp 8.100.000,00 + Rp 35.775.000,00 + Rp 3.500.000,00
= **Rp 47.375.000,00**

g. Pendapatan (b - f) = Rp 117.000.000,00 - Rp 47.375.000,00
= Rp 69.625.000,00

h. B/C Ratio = 69.625.000,00 / 47.375.000,00 = 1,47

i. R/C Ratio = 117.000.000,00 / 47.375.000,00 = 2,47



Gambar 2. Persiapan lahan sebelum tanam.



Gambar 3. Penanaman.



Gambar 4. Tanaman berumur 21 hst



Gambar 5. Varietas Probolinggo berumur 42 hst



Gambar 6. Bawang merah varietas Bima



Gambar 7. Bawang merah varietas Probolinggo



Gambar 8. Portable Photosyntetic System CID Licor 320P