

DAFTAR PUSTAKA

- AAK. 1983. Hijauan Makanan Ternak Potong, Kerja, dan Perah. Yayasan Aksi Agraris kanisius. Yogyakarta.
- Abbasi, A.A., Clarkson, Y.S. and Gebner, H. 1980. Experimental zinc deficiency, effect of testicular function. *J. Of Lab. Clin.* 96: 544-550.
- Ahmad, F. 1981. Dasar – Dasar Ilmu Tanah. Proyek Peningkatan dan Pengembangan Perguruan Tinggi. Universitas Andalas, Padang.
- Ahmed WM, Khadrawy HH, Hanafi EM, El Hameed ARA, Sabra HA. 2009. Effect of copper deficiency on ovarian activity in Egyptian Buffalocows. *World J Zool*, 4:01-08.
- Almatsier, S. 2004. Prinsip Dasar Ilmu Gizi. Jakarta : PT Gramedia Pustaka Umum.
- Aragón, E.F., Naranjo, A.P., Sobreira, G. 2001. Copper, molybdenum and sulphur interaction in ruminant nutrition. *Ciência Rural*. 31:1101- 1106.
- Aregheore, E. M. 2002. Voluntary intake and digestibility of fresh, wilted and dry *Leucaena (Leucaena leucochepala)* at four levels to a basal diet of guinea grass (*Panicum maximum*). *Asian-Aust. J. Anim. Sci.* 15:1139-1146.
- Arsyad, S. 1980. Pengawetan Tanah dan Air. Institut Pertanian Bogor. Bogor.
- Arthur, J.R. 1997. Non-glutathione peroxidase function of selenium. Pp.143-154. In *Biotechnology and Feed Industry. Proc. Alltech's 13th Annual Symposium*. T.P. Lyons and K.A. Jacques eds. Nottingham University Press., Nottingham.
- Bachtiar, E., 2006. Ilmu Tanah. Fakultas Pertanian USU. Medan.
- Balai Pembibitan Ternak Unggul dan Hijauan Pakan Ternak Padang Mengatas. 2012. Buku Profil Balai Pembibitan Ternak Unggul (BPTU) Sapi Potong Sapi Potong Padang Mengatas. Payakumbuh.
- Besung, I.N.K. 2013. Analisa faktor tipe lahan dengan kadar mineral serum sapi Bali. *Buletin Veteriner Undayana*. Vol. 5 No. 2.
- Bot. A and J. Benites. 2005. The importance of soil organic matter key to drought-resistant soil and sustained food and production. *FAO Soils Bulltin* 80 Rome.
- Brandano, P., Rassa, & S. P. G., Lanza. 2004. Feeding Dairy Lamb. In: Pullina,

- G., (Editor). Prolific Sheep. CABI Publishing, Canberra.
- Buckman, H. O. dan N. C. Brady. 1982. Ilmu Tanah. Terjemahan Soegiman, Bhratara Karya Aksara, Jakarta.
- Damry. 2009. Produksi dan kandungan nutrient hijauan padang pengembalaan alam di Kecamatan Lore utara Kabupaten Poso. *J Agroland* 16(4) : 296-300.
- Darmono. 2009. Menyasati peran suplemen logam dan mineral terhadap kesehatan ternak menuju swasembada daging. Orasi pengukuhan profesor riset. Badan Penelitian dan Pengembangan Pertanian. Jakarta.
- Driemeier, D., Colodel, E. M., Seitz, A. L., Barros, S. S., Cruz, C. E. 2002. Study of experimentally induced lesions in sheep by grazing *Brachiaria decumbens*. *Toxicon* 40, 1027-1031.
- Fauzi, A. 2008. Analisa kadar unsur hara karbon organik dan nitrogen di dalam tanah perkebunan kelapa sawit Bengkalis Riau. Tugas Akhir Program Studi Diploma 3 Kimia Analisis. Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Sumatra Utara, Medan.
- Fitriani, Y. 2016. Produktifitas dan kualitas hijauan di padang penggembalaan BPTU-HPT Padang Mengatas. Sripsi. Fakultas Peternakan, Universitas Andalas. Payakumbuh.
- Gartenberg, P.K.,L.R. McDowell, D. Rodriguez,N. Wilkiinson,J.H. Condrad, and F.G. Martin. 1990. Evaliation of trace mineral status of ruminants in northeast Mexico. *Livestock Rest. For Rural Development* 3(2): 1-6.
- Goswami, T. K., R. Bhar, S. E. Jadhav, S. N. Joardar and G. C. Ram. 2005. Role of dietary zinc as a nutritional immune modulator. *Asian-Aust. J. Anim. Sci.* 18:439-452.
- Grace, N.D. 1983. The mineral requirements of grazing ruminants. Occasional Publication No. 9. New Zealand Society of Animal Production.
- Gregory, K.E. 1961. Improvement of Beef Cattle Through Breeding Methode. Regional Publication 120. USDA.
- Hansen, S.L., J.W. Spears, K.E. Lloyd and C.S. Whisnant. 2006. Growth, reproductuve performance and manganese status of heifers fed varying concentrations of manganese. *J. Anim. Sci.* 84 : 3375 – 3380.
- Hardjowigeno, S. 1995. Ilmu Tanah. Akademika Pressindo, Jakarta.
- Infitria dan Khalil. 2014. Studi produksi dan kualitas hijauan di lahan padang rumput UPT Peternakan Universitas Andalas Padang. *Buletin Makanan*

Ternak 101 (1) : 25-33.

- Inoue, Y., T. Osawa, A. Matsui, Y. Asai, Y. Murakami, T. Matsui, and H. Yano. 2002. Changes of serum mineral concentration in horses during exercise. *Asian Aust. J. Anim. Sci.* 15(4): 531–536.
- Junaidi, M dan Diana, S., 2010. Keragaman botanis dan kapasitas tampung padang penggembalaan alami di Kabupaten Yapen. *Jurnal Ilmu Peternakan*. Vol. 5. No. 2. Hal. 92 – 97.
- Khairi, F., A. Muktiani, dan Y. S. Ondho. 2014. Pengaruh suplementasi vitamin E, mineral selenium dan zink terhadap konsumsi nutrient, produksi dan kualitas semen sapi Simental. *Agripet*: vol (14) No.1: 6-16.
- Khalil, M. N. Lestari, P. Sardila and Hermon. 2015. The us of local mineral formulas as a feed block supplement for beef cattle fed on wild forages. Doi : 10.5398/medpet. 38. 1. 34.
- Khan, Z. I., E. Ashraf, E. V. M., Hussain, A., McDowell, L. R. and Ahraf, M. Y. 2005. Seasonal variation of calcium in soil plant animal system at a semiarid sheep ranch, Punjab, Pakistan. *Intl. J. Biol. Biotech.* 2:163-174.
- Khan, Z.I., A. Hussain, M. Ashraf and LR McDowell. 2006. Mineral status of soil and forages in Southwestern Punjab-Pakistan: Micro-minerals. *Asian-Aust. J. Anim Sci.* 19 (8):1139-1147.
- Kleden, M.M, M. R. D. Ratu dan M. D. S. Randu. 2015. Kapasitas tampung hijauan pakan dalam areal perkebunan kopi dan padang rumput alam di kabupaten flores timur nusa tenggara timur. *Jurnal Zootek*. Vol. 35 No. 2 : 340-350. ISSN 0852 – 2626.
- Leiwakabessy, F.M. dan A. Sutandi. 2004. Diktat Kuliah Pupuk dan Pemupukan. Bogor : Fakultas Pertanian IPB. 37 hal.
- Lindsay, W.L. 1972. Inorganic phase Eguilibria of micronutrients in soils. In: *Micronutrients in Agriculture*. J.J. Mortverdt., P.M. Giodano and W.L, Lindsay (edit.) Soil Sci. Soc. Amer. Inc. Madison.
- Lingga P. Dan Marsono. 2008. *Petunjuk Penggunaan Pupuk*. Penebar Swadaya. Jakarta.
- Little, D.A., S. Kompang, and R.J. Petheram. 1989. The mineral composition of Indonesian ruminant forages. *Trop. Agric. (Trinidad)* 66(1): 33-77.
- Maynard, L. A.,J.K. Loosly, H.f. Hintz, and R.G. Warner. 1982. *Animal nutrition*. 7th edition. Mc Graw-Hill Book Co. Inc., New York.
- Mc Illroy, R.J. 1977. *Pengantar Budidaya Padang Rumput Tropika*. *Terjemahan*.

- S. Susetyo, Soedarmadi, I. Kismono, dan S. Harini I.S. Pradnya Paramita. Jakarta.
- Mc. Naught, K.J. 1970. Diagnoses of mineral deficiencies in grass legume pastures by analysis. Proc. of the XI Intergrassland Congress. Queensland, p. 334.
- McDonald, P., R.A. Edwards, and J.F.D. Greenhalgh. 1988. Animal Nutrition. John Wiley and Sons Inc., New York. P. 96–105.
- McDowell, L.R., Y. Salih, J.F. Hentges, R.M. Mason. Jr. And C.J. Wilcox. 1989. Effect of mineral supplementation on tissue mineral concentrations of grazing Brahman Cattle II. Trace Mineral Inst. J. Anim Sci. 4:6-13.
- Milfa. S, Ni. K. S dan I. Wayan. M. T. 2015. Profil *growth hormone* sapi Bali betina pada tiga tipe lahan pemeliharaan di Provinsi Bali. Buletin Veteriner Udayana. Vol. 7. No. 1. ISSN 2085 – 2495.
- Mitchell, R.L., J.W.S. Reith and I.M. Johnson. 1957. Trace element uptake in relation to soil content. J. Sci. Food AGR. 8:51.
- Mountousis, I., K. Papanikolaou, G. Stanogias, Ch. Roukos, F. Chatzitheodoridis, and A. Papazafiriou. 2009. Mineral content of the herbage material in pastures of Mt. Varnoudas NW Greece. Agronomy Research 7(2) 837-846.
- Murtidjo, B.A. 1990. Beternak Sapi Potong. Penerbit Kanisius. Yogyakarta.
- Neville, F. Suttle. 2010. Honorary Research Fellow Moredun Foundation Pentland Science Park Bush Loan Penicuik Midlothian EH26 0PZ UK: Mineral Nutrition of Livestock, 4th Edition.
- Noor, R.R. 1999. Peran Gen Kelenturan Fenotip dalam Mengontrol Interaksi antara Faktor Genotipe dengan Lingkungan. Bogor.
- NRC. 1984. Nutrient Requirement of Dairy Cattle. Nasional Academy Press. Washington D.C.
- Oberhuber W, & W. Kofler. 2000. Topographic influences on radial growth of Scots pine (*Pinus sylvestris* L.) at small spatial scales. Plant Ecol. 146:231-240.
- Ozane, P.G. 1955. The effect nitrogen on zinc deficiency in Subterranean clover. Australian, J. Biol. Sci. 8:47.
- Pancapalaga, W. 2011. Pengaruh rasio penggunaan limbah ternak dan hijauan terhadap kualitas pupuk cair. Gama. Vol. 7. No. 1, 61-68.

- Pfander, W.H. 1971. Animal nutrition in tropics problems and solution. *J. Anim, Sci.* 33:843.
- Philipson W.R., J.M. Ward, & B.G. Butterfield. 1971. *The vascular Cambium: Its development and Activity.* Chapman & Hall Ltd. London.
- Piliang, W. G. And Djojosoebagio, S. 2006. *Fisiologi Nutrisi Volume I.* IPB Press. Bogor.
- Pradhan, Rajani. 2008. Reproductive disorders in cattle due to nutritional status. *Journal of international development and cooperation*, 14 (1): 45-66.
- Prakkasi, A. 1990. *Ilmu Gizi dan Makanan Ternak Monogastrik.* Bandung.
- Prawiradiputra, B.R. , E. Sutedi, Sajimin dan A. Fanindi. 2012. *Hijauan Pakan Ternak Untuk Lahan Sub-obtimal.* Badan Penelitian dan Pengembangan Pertanian, Kementerian Pertanian. Jakarta.
- Pujiastari, N.N.T., P. Suastika, dan N.K. Suwiti. 2015. Kadar mineral kalsium dan besi pada sapi bali yang dipelihara di lahan persawahan. *Buletin Veteriner Udayana.* Volume 7 No. 1.
- Purbajanti, E.D. 2013. *Rumput dan Legum Sebagai Hijauan Makanan Ternak.* Yogyakarta: Graha Ilmu.
- Reid R.C. and Horvarth. 1980. Soil chemistry and mineral problems in farm livestock. A. Review. *Anim. Feed Sci. Techal.* 5:95.
- Reksohadiprodjo, S. 1996. Evaluasi Produksi Pasture. Dalam *Kursus Singkat Teknik Evaluasi Pakan Ruminansia.* Jurusan liarn Nutrisi dan Makanan Ternak Fakultas Peternakan UGM, Yogyakarta.
- _____. 1994. *Produksi Tanaman Hijauan Makanan Ternak Tropik.* Edisi Ketiga. BPFE. Yogyakarta.
- Rhue, R.D and G. Kidder. 1983. Analytical procedures used by the. IFAS extension soil laboratory and the interpretation of results. *Soil Sci. Dept., Univ. Florida, Gainesville.*
- Riwandi., M.F. Barchia., dan Merakati, H. 2009. Penilaian kesuburan dan kesehatan tanah dengan pendekatan indikator kinerja tanah dan bioassay tanaman. Laporan kegiatan penelitian hibah penelitian strategis nasional. Universitas Bengkulu.
- Rojas, L.X., L.R. McDowell, N.S. Wilkinson and F.G. Martin. 1993. Mineral status of soils, forages, and beef cattle in South East Venezuela. I. Macro-minerals and forage organic constituents. *Internasional. Jurnal of Animal Sciences*, 8:183-188.

- Rojas, M. A., I. A. Dyer and W. A. Cassatt. 1965. Manganese deficiency in bovine. *J. Anim. Sci.* 24:664-667
- Sanchez. 1993. *Sifat dan Pengelolaan Tanah Tropika*. Jilid 2. Terjemahan Amir Hamzah. Penerbit Institut Teknologi Bandung. Bandung.
- Sharma, K.C., B.A. Kronttz and A.C. Brown. 1968. Interaction of phosphorus and zinc on two dwarf wheats. *Agro. J.* 60:329.
- Sharma, M.C., S. Raju, C. Joshi, H. Kaur, and V.P. Varshney. 2003. Studies on serum micromineral, hormone and vitamin profile and its effect on production and therapeutic management of buffaloes in Haryana State of India. *Asian Aust. J. Anim. Sci.* 16(4): 519–528.
- Shisia, K. S., V. Ngure, H. Nyambaka, and F. D. O. Oudor. 2013. Effect of pH and forage species on mineral concentrations in cattle breeds in major garzing area Uasin Gishu County, Kenya. *Int.J.Curr.Microbiol.App.Sci* (2013) 2(12): 247-254.
- Soebagyo. 1969. *Dasar-dasar Ilmu Tanah*. Soreangan, Jakarta.
- Soepardi, G. 1982. The Zinc status in Indonesia agriculture. *Contr. Centr. Rest. Inst. Food Crops, Bogor*. No. 68: 10-31.
- Steel, R.G.D., and Torrie, J.H. 1960. *Principles and Procedures of Statistics*, MacGraw Hill Book Co. Inc., New York.
- Stevenson, F. J. 1982. *Humus Chemistry, Genesis, Composition, Reaction*. 2nd Ed. John Wiley and Sons. New York.
- Subagyo, I. Dan Kusmartono. 1988. *Ilmu Kultur Padangan*. Nuffic. Universitas Brawijaya. Malang.
- Susetyo, S. 1980. *Padang pengembalaan*. Departemen Ilmu Makanan Ternak. Fakultas Peternakan IPB. Bogor.
- Tajeda, R. 1984. *Evaluation of the Mineral Status of Cattle in Specific Regions in Guatemala*. Dissertation. Univ. of Florida. Gainesville.
- Tan, K.H. 1991. *Principles of Soil Chemistry*. Marcel Dekker, Inc. New York and Basel.
- Underwood, E.J., and N.F. Suttle. 1999. *The Mineral of Livestock*. 3rd edition. CAB International Publishing. Wallingford. Pp.614.
- Velasquez-Pereira, J.B., L.R. McDowell, J.H. Conrad, N.S. Wilkinson and F.G. Martin. 1997. Mineral status of soil, forages, and cattle in Nicaragua. I.

Micro-minerals. Rev. Fac. Agron., 14:73-89.

Wadi, A., Y. Ishii & S. Idota. 2003. Effects of the level of fertilizer input on tiller and leaf development in relation with dry matter accumulation of napiergrass and kinggrass. Grassland Sci. 49:311-323.

Whitehead, D.C.,S.S. 2000. Nutrient Elements in Grassland: Soil-Plant-Animal Relationships. CABI Publishing, Devon, UK. Pp.15-39.

Widhyari, S.D., A. Esfandiari, A. Wijaya, R. Wulansari, S. Widodo, dan L. Maylina. 2015. Tinjauan penambahan mineral Zn dalam pakan terhadap kualitas *spermatozoa* pada sapi *Frisian holstein* jantan. JIPI. Vol. 20 (1) : 72-77.

Wilde, D. 2006. Influence of macro and micro minerals in the peri-parturient period on fertility in dairy cattle. Animal Reproduction Science. 96:240-249.

