

DAFTAR PUSTAKA

- Alves, A.R., Silva, L.D., Beelen, P.M.G., Daniel, J.L.P. dan Santos, F.A.P. (2017). Nutritive value of tropical *hays*: effects of chemical composition on *in vitro* gas production. *J. Anim. Feed Sci.Techol.*, 224, 71–79.
- AOAC. 2005. *Official Methods of Analysis of the Association of Official Analytical Chemists* (16th ed.). AOAC International, Maryland, USA.
- Arwinsyah, M Tafsin and Yunilas. 2019. Effect Of Bio Activator Use On Corn Cobs As A Complete Feed On Performance And Digestibility Of Local Sheep. *AEFS 2018 IOP Publishing IOP Conf. Series: Earth and Environmental Science* 260.
- Astuti, P. N. 2011. Pengaruh Frekuensi Pemotongan terhadap Produksi dan Kandungan Nutrien Rumput Odot (*Pennisetum purpureum* cv. *Mott*). *J. Ilmu-Ilmu Peternakan*. 21(2):1-6.
- Ati, A. R. A., Y. H. Manggol, & D. B. Osa. 2018. Kecernaan bahan kering dan bahan organik secara *in vitro* hijauan padang penggembalaan batu beringin desa sumlili kecamatan kupang barat, kabupaten kupang. *J. Nukl. Peternak.*, 5 (2): 155–162.
- Baran, J., Mikołajczak, K., and Zawisza-Raszka, A. 2022. Effect of drying temperature and methods on the chemical composition and digestibility of forage. *J. Anim.* 12(6):15-23.
- Bates, G. 2011. *Factors in High-Quality Hay Production*. Progressive Cattleman. West Edition.
- Bureenok, S., Namihira, T., Kawamoto, Y. and Nakada, T. 2016. The effect of different drying methods on the nutritive value and fermentation quality of tropical grasses. *Asian-Australasian. J. Anim. Sci.* 29(8): 1125–1132.
- Chen, X. J., Li, J., Zhou, T., Zhang, Z., Yu, H., Li, S., dan Zhou, C. 2024. Effects of heat treatment on rumen degradability and protein intestinal digestibility of black soldier fly (*Hermetia illucens* L.) in goat. *Scientific Reports*. 14(1)
- Crowe, J.D., Feringa, N., Pattathil, S., Merritt, B., Foster, C., Dines, D., Ong, R.G., and D.B. Hodge. 2017. Identification of developmental stage and anatomical fraction contributions to cell wall recalcitrance in *Panicum virgatum*. *Biotechnol. J. Biofuels*. 10(1):184-189.
- Dewi, A. S. K., Muliati, M., Zahra, S. F., Aprilla, S. M., dan Salsabila, N. 2024. *Metode Perbanyak Agen Pengendali Hayati*. Universitas Negeri Makassar.
- Du, H., Zhang, L., and Li, J. 2025. Experimental Study on Drying Characteristics of Alfalfa Hay Bales. *J. MDPI*.
- Du, J., and Liu, C. 2025. Experimental Study on Drying Characteristics of Alfalfa Hay Bales Using Hot Air Convection. *J. Applied Sci.* 15(7), 3921.

- Dumadi, D., Wibawa, D. S., Susilo, A. 2021. Interval pemotongan optimal pada rumput gajah (*Pennisetum purpureum*). J. Hijauan Pakan Ternak, 13(2):72–78.
- Fahmi, M., R. Utomo., B. Suhartanto., A. Astuti., N. Umami. 2021. Key Eng. Mater. 884: 204- 211.
- Farda, M. N., Nugroho, B. A., Pratama, R. A. 2020. Kandungan air dan bahan kering pada berbagai umur panen rumput gajah. J. Peternakan Nusantara. 5(2):101–108.
- Febriana G. I. M., R. Wiradimadja., I. Hernaman. 2018. Pengaruh Lama Penyimpanan Terhadap Sifat Fisik Dedak Padi. J. Ilmiah Peternakan Terpadu. 6(3):163-166.
- Fongin, S., Kawai, K., Harnkarnsujarit, N., dan Hagura, Y. 2017. Effects of water and maltodextrin on the glass transition temperature of freeze-dried mango pulp and an empirical model to predict plasticizing effect of water on dried fruits. J. food engineering. 210:91-97.
- Getachew, G., Robinson, P. H., DePeters, E. J., and Taylor, S. J. 2004. Relationships between chemical composition, dry matter degradation and *in vitro* gas production of several ruminant feeds. J. Anim. Feed Sci. Technol. (1–4):57–71.
- Hall, M.B., & Mertens, D.R. 2012. A ring test of *in vitro* neutral detergent fiber digestibility: Analytical variability and sample ranking. J. Dairy. Sci. 95(4):1992-2003.
- Harmini, H., S. Sajimin, A. Fanindi dan Husni, A. 2020. Keragaan Agronomi Rumput Gajah (*Pennisetum purpureum* cv Taiwan) Hasil Irradiasi Sinar Gamma. J. Ilmu Nutrisi dan Teknologi Pakan. 18(3):62-66.
- I Nyoman Gede, Nita C.V. Monintja, Hengky Luntungan. 2021. Perencanaan Alat Pengering Padi Kapasitas 1000 Kg/Jam dengan Menggunakan Pemanas Sekam Padi. J. Tekno Mesin. 7(2):35-42.
- Ihediwa, R., Smith, C., and Williams, D. 2022. Effects of drying methods and temperature on the nutritional and rehydration quality of dried forage grasses.
- Ikhsan, M., Muhsin, Patang. 2016. Pengaruh Variasi Suhu Pengering Terhadap Mutu Dendeng Ikan Lele Dumbo (*Clarias gariepinus*). J. Pendidikan Teknologi Pertanian. 2(1):14-122.
- Indriani, A., Witanto, Y., Hendra. 2019. Pembuatan Alat Pengering Berputar (*Rotary*) Kopi dan Lada Hitam Menggunakan Mikrokontroler Arduino Uno Desa Air Raman Kabupaten Kepahiang Propinsi Bengkulu. J. Dharma Rafflesia Unib. 64-76.
- Infitria, A., Setiawan, A., Nurfadillah. 2021. Ketahanan pakan pada musim kemarau. J. Agro Peternakan. 14(1):22–29.
- Jančík, F., Šimek, R., and Dobeš, R. 2017. Effects of drying procedures on chemical composition and *in-vitro* digestibility of forages. South African. J.

Anim. Sci. 47(5):614-623.

- Jugović, M., Zoranović, M., Ivanisevic, M., Malicevic, Z., Živkovic, M., and Jakišić, T. 2023. The impact of different methods of drying and preparation method on the basic chemical composition of hay. *Notulae Botanicae Horti Agrobotanici Cluj-Napoca*. 51(2)
- Jung, H. G., and Allen, M. S. 1995. Characteristics of plant cell walls affecting intake and digestibility of forages by ruminants. *J. Anim. Sci*, 73(9):2774–2790.
- Kamar I. K. W., I. D.S. Nyoman., I. G. A. D. S. Rejeki. 2023. Kualitas Fisik dan Kandungan Energi Beberapa Jenis Rumput dengan Waktu Pemotongan yang Berbeda Di BPTU HPT Denpasar. *J. Gema Agro*. 28(1):52-58
- Karyono dan Novita. 2021. Fermentasi Limbah Kulit Kopi (*Coffea Sp*) dengan Mol Bonggol Pisang Air Kelapa Sebagai Pakan Ternak Ruminansia. *JPI*. 23 (3):276-283
- Karyono, T., Aro, B., and Widodo, I. 2023. Hay quality indicators and preservation techniques. *J. Agric. Sci*. 45(3):204-212.
- Khairani L, Ishii Y, Idota S, Utamy RF and Nishiwaki A. 2013. Variation in growth attributes, dry matter yield and quality among 6 genotypes of napier grass used for biomass in year of establishment in Southern Kyushu, Japan. *Asian. J. of Agric. Res*.7(1):15–25.
- Khan, N.A., Yu, P., Ali, M., Cone, J.W. and Hendriks, W.H. 2015. Nutritive value of maize silage in relation to dairy cow performance: a review. *J. Anim. Feed. Sci. Technol*. 199:1–12.
- Kung, L., Shaver, R.D., Grant, R.J. and Schmidt, R.J. 2018. Silage review: Interpretation of chemical, microbial, and organoleptic components of silages. *J. of Dairy Science*. 101(5):4020–4033.
- Kurniati, D., Hidayati, N., dan Kurnadi, B. 2021. Efek perbedaan teknik pengeringan terhadap kualitas hay rumput odot (*The effect of different drying techniques on the quality of odot grass hay*). *J. MADURANCH*. 6(1):9–14
- Li, Y., Hao, L., Du, S., Si, Q., Zhang, Y., Lin, K., and Jia, Y. 2024. Effects of storage time on nutritive qualities, volatile components, and microbial community of native grass hay. *J. Stor. Prod. Res*.10(9):102-454.
- Listiani, R. 2023. *Kecernaan in vitro pakan hay dan sorgum multinutrien block pada kambing Peranakan Etawa*. Tesis. Sekolah Sarjan. Universitas Mataram, Mataram.
- McDonald, P., Edwards, R.A., Greenhalgh, J.F.D., Morgan, C.A., Sinclair, L.A. and Wilkinson, R.G. 2010. *Animal Nutrition* (7th ed.). Harlow: Pearson Education Limited.
- McDonald, P., Henderson, A. R., and Heron, S. J. E. 1991.

The Biochemistry of Silage (2nd ed.). Chalcombe Publications.

- Min, B.R., Barry, T.N., Attwood, G.T. and McNabb, W.C. 2011. The effect of condensed tannins on the nutrition and health of ruminants fed fresh temperate forages: a review. *J. Anim. Feed. Sci. Technol.*(1-4):3–19.
- Minson, D. J. 1990. *Forage in Ruminant Nutrition*. Academic Press. ISBN: 978-0124983404.
- Muchlis, A., Sema, S., Syamsu, J.A. 2023. Teknologi Pengolahan Pakan Hijauan untuk Ternak Sapi di Daerah Tropis. *J. Ilmu dan Teknologi Peternakan Terpadu*.1(1): 145–152
- Neres, M., Cardoso, L. L., and M. Andrade. 2010. Production of alfalfa hay under different drying methods. *Revista Brasileira de Zootecnia*. 39(9):1998-2004.
- Nicolaus, N. 2024. Teknologi Pengolahan Pakan Hijauan di Daerah Tropis Untuk Ternak Sapi. *J. teknologi peternakan*. 1(1):30-38
- Nurjanah L L., N Umami, A Kurniawati, C Hanim, B Prasetyo WB, D H V Paradhipta, T Meidiana. 2023. The Quality of Physic and pH of Gama Umami Grass Silage Supplemented with Calliandra Leaves and Pollard. The 4th International Conference on Agriculture and Bio-industry (ICAGRI-2022).
- Orikasa, T., S. Koide., S. Okamoto., Imaizumi, T., Y. Muramatsu., J.I. Takeda, dan A. Tagawa, A. 2014. Impacts of hot air and vacuum drying on the quality attributes of kiwifruit slices. *J. Food. engineer*.125(1): 51-58.
- Pepeta, B. N., M. Moyo, F. A. Adejoro, A. Hassen, & I. V. Nsahlai. 2022. Techniques Used to Determine Botanical Composition, Intake, and Digestibility of Forages by Ruminants. *Agronomy*, 12 (10): 1–18.
- Purba, Y.M.S. 2020. Pengaruh Suhu dan Lama Pengeringan Terhadap Karakteristik Teh Herbal *Matcha* Daun Tenggulun (*Protium javanicum* Burm.F.). Skripsi. Tidak dipublikasikan. Universitas Udayana, Bukit Jimbaran.
- Qisthi, R. T., Novita, N. K., Khatima, H., and Chamila, A. 2021. *Pengendalian Hama Dan Penyakit Tanaman Pangan Dan Hortikultura*. Universitas Negeri Makassar. Makassar
- Rahayu, S., Nurhidayati, N., Kurniawidi, D. W., dan Alaa, S. 2021. Identifikasi Sifat Fisis Kandidat Wafer Dari Limbah Tahu Sebagai Alternatif Pakan Ternak. *J. Indonesian Physical. Review*. 4(1):51-57.
- Raja Pengereng. 2023. *Rotari Dryer Kapasitas 150–300 Kg*. Diakses pada 27 Agustus 2025, dari <https://www.rajapengereng.com/page/Rotari-Dryer-Kapasitas-150-300-Kg>
- Resch, R., Adler, A., and Pötsch, E. M. 2014. Impact of different drying techniques on hay quality. 27-38.

- Retnani, Y., E., D. Putra dan L., Herawati. 2011. Pengaruh taraf penyemprotan dan lama penyimpanan terhadap daya tahan ransum ayam broiler finisher. *J. Agripet*.11(1):10-14.
- Rosalina, R., G. Sushanti., P. Rahayu., D. K. Putri. 2023. Pengaruh kemiringan dan suhu gas *inlet rotary dryer* terhadap laju pengeringan gabah. *J. Agrotek*.17(2):242-249.
- Rotz, C. A., and Abrams, S. M. 1988. Losses and quality changes during alfalfa *hay* harvest and storage. *Transactions of the ASAE*. 31(2):350-355.
- Rotz, C. A., and Muck, R. E. 1994. Changes in Forage Quality during Harvest and Storage. In: Fahey, G. C., *et al.* (Eds.), Forage Quality, Evaluation, and Utilization (pp. 828–868). American Society of Agronomy.
- Sagita, L., L. Liman., F. Fathul., M. Muhtarudin. 2022. Pengaruh Pemberian Jenis Dan Dosis Pupuk Nitrogen (Urea Dan *Calcium Ammonium Nitrate*) Terhadap Produktivitas Rumput Gama Umami. *J. Riset dan Inovasi Peternakan*. 6(4): 374-384
- Sajimin, N. D., Purwantari, E. Sutedi dan Oyo. 2011. Pengaruh Interval Potong terhadap Produktivitas dan Kualitas Tanaman Bangun-Bangun (*Coleus amboinicus* L.) sebagai Komoditas Harapan Ternak. *JITV*. 16(4):288-293.
- Sajimin, S., Yamin, M., dan Kurniawati, N. 2011. Interval potong dan kualitas nutrisi tanaman bangun-bangun (*Coleus amboinicus*). *J. Ilmu Ternak dan Veteriner*. 16(3):187–194.
- Salvia, Ramaiyulis, M Dewi, DK Sari. 2022. Teknologi Pengolahan Pakan. Politeknik Pertanian Negeri Payakumbuh. Sumatera Barat.
- Samputri, E., dan Rahman, A. 2020. *Produksi dan kualitas hijauan pakan pada berbagai musim di Indonesia*. *J. Ilmu Ternak Tropis*. 5(2):45–52.
- Sandi, H., Khasrad, Wiradimadja, R. 2018. Pengaruh interval pemotongan terhadap produksi dan kualitas tanaman bangun-bangun (*Coleus amboinicus* Lour). *J. Ilmu Produksi dan Teknologi Hasil Peternakan*. 6(3): 161–166.
- Saprudin, A. M., Koswara, E., Budiman, H., Dony, S. 2018. Proses Kerja Mesin *Rotary dryer* pada Pembuatan Pupuk Organik Granul di PT. Petrosida Gresik Sumedang. *J. Universitas Majalengka*. 20–23.
- Sari, N.P., Abdullah, L. dan Jayanegara, A. 2020. Nutrient content, digestibility and palatability of tropical *hay*: effect of drying methods and storage duration. *J. Tropic. Anim. Sci*. 43(2):149–157.
- Sarnklong, C., Cone, J.W., Pellikaan, W. And Hendriks, W.H. 2010. Utilization of rice straw and different treatments to improve its feed value for ruminants: a review. *Asian-Australasian Journal of Animal Sciences*. 23(5):680–692.
- Shonte, T.T., Duodu, K.G. and de Kock, H.L., 2020. Effect of drying methods on chemical composition and antioxidant activity of underutilized stinging

nettle leaves. *Heliyon*. 6(5).

Standar Nasional Indonesia (SNI). 2006. SNI Ransum Broiler Starter 01-3930-2006. Badan Standar Nasional Indonesia.

Syarifuddin H, D Devitriano, M Ridwan. 2014. Aplikasi Teknologi Bio Cubed *Hay* Menuju Desa Mandiri Pakan Ternak. *J. Pengabdian pada Masyarakat*. 29(4):24-30.

Tessema, Z.K., Mihret, J., and Solomon, M. 2010. Effect of defoliation frequency and cutting height on growth, dry-matter yield and nutritive value of Napier grass (*Pennisetum purpureum* (L.) Schumach). *J. Grass. For. Sci*. 65(4):421–430.

Tessema, Z.K., Yami, A. and Abebe, G. 2019. Nutritive value of grasses and legumes as influenced by harvesting stage, conservation method and storage duration. *J. Anim. Feed. Sci*. 28(2):130–140.

Thiex, N., & Richardson, C.R. 2003. Challenges in measuring moisture content of feeds. *J. Anim. Sci*. 81(12): 3255-3266.

Tika, Y. Y. 2022. Mekanisme beberapa mesin pengering pertanian. *J. Penelitian Fisika dan Terapannya (Jupiter)*. 4(1):20-28.

Trisnadewi, A. A. A. S., Cakra, I. G. L. O., Yadnya, T. G. B., Budiasa, I. K. M., Suarna, I. W., dan Udayana, I. D. G. A. 2016. Teknologi Pengawetan Hijauan Sebagai Alternatif Peningkatan Ketersediaan Pakan di Desa Sebudi Kecamatan Selat Kabupaten Karangasem. *J. Udayana Mengabdi*. 15.

Tumbel, N., Pojoh, B., Manurung, S. 2016. Rekayasa Alat Pengering Jagung Sistem *Rotary*. *J. Penelitian Teknologi Industry*. 8(2):107-116.

Umami, N. 2021. Develops Gama Umami, Superior Grass from Gamma Ray Radiation. <https://fapet.ugm.ac.id/id/fapet-ugm-kembangkan-gama-umami-rumput-unggul-hasil-radiasisinar-gamma/>. Diakses Desember 2021

Utomo. 2015. Konservasi hijauan pakan dan peningkatan kualitas bahan pakan berserat tinggi. Gadjah Mada University Press. Yogyakarta.

Van Soest, P. J., Robertson, J. B., and Lewis, B. A. 1991. Methods for dietary fiber, neutral detergent fiber, and nonstarch polysaccharides in relation to animal nutrition. *J. of Dairy Science*. 74(10):3583–3597.

Van Soest, P.J. 1994. *Nutritional Ecology of the Ruminant* (2nd ed.). Ithaca: Cornell University Press.

Wangchuk K, Rai K, Nirola H, Thukten, Dendup C and Mongar D. 2015. Forage growth, yield and quality responses of Napier hybrid grass cultivars to three cutting intervals in the Himalayan foothills. *Tropical Grasslands-Forrajes Tropicales*. 3(3):142–150.

- Wilkinson, J.M., and Davies, D.R. 2013. The aerobic stability of silage: key findings and recent developments. *J. Gras. For. Sci.* 68(1):1–19.
- Yerizam, M., Aneasari, Purnamasari, I., Fadarina, Fani Dillah, V., and Pakpahan, C. 2019. Kinerja *Rotary dryer* pada Pengeringan Chips Manihot Esculenta dalam Pembuatan Mocaf Berdasarkan Variasi Waktu, Temperatur dan Laju Pengeringan. *J. Kinetika.* 10(2):24–28.
- Zhang, M., Tang, J., Mujumdar, A. S., and Wang, S. 2006. Trends in microwave-related drying of fruits and vegetables. *J. Tren. Food. Sci. Technol.* 17(10):524–534.