

## DAFTAR PUSTAKA

- Arifriana R, Indrioko S, Syahbudin A. (2017). Variasi Cendana (*Santalum album*) Berdasarkan Morfologi Daun dan Bunga di Desa Petir, Rongkop, Gunungkidul. *Jurnal Ilmu Kehutanan*, 11(1): 97-108.
- Australian Centre for International Agricultural Research (ACIAR). (2021). *Domestication and Breeding of Sandalwood in Fiji and Tonga*: Final report. ACIAR.
- Bazzaz, F. A. (1979). Contribution to reproductive effort by photosynthesis of flowers and fruits. *Nature*, 279, 554–555.
- Bhaskar, V. (1992). Pollination biology and fertilization in *Santalum album* L (Santalaceae). *Flora* 187: 73 – 74.
- Chavan, S. B., Uthappa, A. R., Chichaghare, A. R., (2024). Past, Present and Future of Indian Sandalwood (*Santalum album*) cultivation and commercial prospects. *Discover Applied Sciences*, 6(12), 627.
- Copeland, L.O., M.B. McDonald. (2001). *Principles of Seed Science and Technology*, Edisi ke 4. Chapman & Hall, New York, USA.
- Corner, E. J. H. (1966). *The natural history of palms*. London, UK: Weidenfeld & Nicholson.
- da Silva JAT, Page T, Zhang X, Kher MM, Nataraj M, Soner D, Ma G. (2016). Sandalwood: Basic Biology, Tissue Culture, and Genetic Transformation. *Planta* 243: 847–887.
- Donohue, K., Polisetty, C. R., & Wender, N. J. (2005). Genetic basis and consequences of niche construction: Plasticity-induced genetic constraints on the evolution of seed dispersal in *Arabidopsis thaliana*. *American Naturalist*, 165, 537–550.
- Fathin A. N, Ratnaningrum Y. W. N. (2018). The Differences in Floral Structure of Three Sandalwood Variants in One of Gunung Sewu (Indonesia) Population, and their Consequences on Visitor Diversity and Visitation Rate. *Biodiversitas* 19 (3): 1097-1101.
- Ferrini, F., Fini, A., Amoroso, G., & Frangi, P. (2008). Mulching of ornamental trees: effects on growth and physiology. *Arboriculture & Urban Forestry*, 34, 157-162.
- Gonzaga, J. M. S., Manoel, R. O., Sousa, A. C. B., Souza, A. P., Moraes, M. L. T., Freitas, M. L. M., & Sebbenn, A. M. (2016). Pollen Contamination and Nonrandom Mating in a *Eucalyptus camaldulensis* Dehnh Seedling Seed Orchard. *Silvae Genet*, 65(1), 1-11.
- Goszka, A. R., & Snell, R. S. (2020). Seed quality and seed quantity in red maple depends on weather and individual tree characteristics. *Ecology and Evolution*, 10(23), 13109-13121.
- Greene, D. F., & Johnson, E. A. (1992). Can the variation in samara mass and terminal velocity on an individual plant affect the distribution of dispersal distances?. *The American Naturalist*, 139, 825–838.
- Han, Q., Kabeya, D., Iio, A., & Kakubari, Y. (2008). Masting in *Fagus crenata* and its influence on the nitrogen content and dry mass of winter buds. *Tree Physiology*, 28(8), 1269–1276.
- Hardi, T. (2005). Hama Pada Tanaman Cendana. *Wana Benih*, 6(2), 75–81. Pusat Penelitian dan Pengembangan Hutan Tanaman.

- Haryjanto, L. (2009). Keragaman Genetik Cendana (*Santalum album* Linn) di Kebun Konservasi Ex situ Watusipat, Gunungkidul, Dengan Penanda Isozim. *Jurnal Pemuliaan Tanaman Hutan* 3(3): 127-138.
- Haryjanto, L. (2017). Dukungan Konservasi Sumberdaya Genetik Cendana (*Santalum album*) pada Program Pemuliaan Genetik. In *Prosiding SNPBS (Seminar Nasional Pendidikan Biologi dan Saintek)*. Pp. 258-263.
- Haryjanto L, Widowati T. B, Sumardi S, Fiani A, Hadiyan Y. (2017). Variation of Chemical Compounds of Sandalwood Oil From Various Provenances in Indonesia. *Indo J For Res* 11 (1): 77-86.
- Haryjanto, L., Putri, A. I., Herawan, T., Fauzi, M. A., Priatna, D., Herdyantara, B., & Hidayat, S. (2020). Seed Source Potential and In Situ Conservation of Kulim (*Scorodocarpus borneensis* Becc) In PT. Arara Abadi, Riau, Sumatera. In *IOP Conference Series: Earth and Environmental Science* (Vol. 522, No. 1, p. 012007). IOP Publishing.
- Kementerian Lingkungan Hidup dan Kehutanan Republik Indonesia. (2013). Surat Keputusan MenLHK RI No.707/Menhut-II/2013. Jakarta: Kementerian Lingkungan Hidup dan Kehutanan.
- Kementerian Lingkungan Hidup dan Kehutanan. (2020). Peraturan Menteri Lingkungan Hidup dan Kehutanan Republik Indonesia Nomor P.3/MENLHK/SETJEN/KUM.1/1/2020 tentang Penyelenggaraan Perbenihan Tanaman Hutan. Jakarta.
- Kurniawan, E. (2017). Daya dan Kecepatan Berkecambah Benih Pulai (*Alstonia scholaris*) yang Disimpan Selama Enam Tahun pada Ruang Simpan Dingin. *Info Teknsi Eboni*. Vol. 14 No. 2, Halaman 103-110.
- Lhuillier, E., Butaud, J. F., dan Bouvet, J. M. (2006). Extensive Clonality and Strong Differentiation in the Insular Pacific Tree *Santalum insulare*: Implications for its Conservation. *Annals of Botany*, 98(5), 1061-1072.
- Lismono, R. (2020). *Pengelolaan Cendana di Provinsi Nusa Tenggara Timur. Webinar BIOTIFOR 2020 series 2: Challenge and opportunity in development of sandalwood for supporting social forestry and land rehabilitation*. Yogyakarta, Indonesia.
- Loewe-Muñoz, V., Bonomelli, C., Delard, C., Del Río, R., & Balzarini, M. (2025). Effect of Fertilization on the Performance of Adult Pinus pinea Trees. *Biology*, 14(2), 216.
- Manonmani, V dan K Vanangamudi. (2002). Effect of Seed Source and Size on Seed Germination and Seedling Vigour of Sandal (*Santalum album*). *Journal of Tropical Forest Science* 14(1): 150-155.
- Mulawarman, JM Roshetko, SM Sasongko dan D Irianto. (2002). *Pengelolaan Benih Pohon, sumber benih, pengumpulan dan penanganan benih: pedoman lapang untuk petugas lapang dan petani*. International Centre for Research in Agroforestry (ICRAF) dan Winrock International. Bogor, Indonesia. 46 p.
- Ordonez J.L., Retana J, Espelta J.M. (2005). Effects of tree size crown damage, and tree location on post-fire survival and cone production of Pinus nigra Trees. *For Ecol Manage* 206, 109-117.
- Page, T, Doran, J, Tungon J, Tabi M. (2020). *Restoration of Vanuatu sandalwood (Santalum austrocaledonicum) through participatory domestication*. *Aus For* 83 (4): 216-226.
- Paudel, M., Sharma, G. B., & Kafle, G. (2025). Growth Performance of

- Sandalwood (Santalum album) Plant in Western Nepal. *The Scientific World Journal*, 2025(1), 3052342.
- PDASHL, D. (2016). *Petunjuk pelaksanaan standar sumber benih* (2nd ed.). Jakarta: Direktorat Perbenihan Tanaman Hutan.
- Pramono, A. A. (2016). Variasi Dimensi Pohon dan Kapasitas Produksi Benih pada Tegakan Kilemo (*Litsea cubeba*) di Ciwidey, Jawa Barat. *Prosiding Seminar Nasional Masyarakat Biodiversitas Indonesia*, 2(2) 232 – 236.
- Pratiwi, W.A. (2019). *Keragaman Genetik Cendana Hasil Reproduksi Tiga Tipe Induk di Desa Petir, Kecamatan Rongkop. Kabupaten Gunungkidul*. Skripsi S1. Fakultas Kehutanan. Universitas Gadjah Mada. Yogyakarta.
- Pray, C., & Ramaswami, B. (1991). *A framework for seed policy analysis in developing countries*. Intl Food Policy Res Inst.
- Pronk, G. (2022). The Current Status of Indian Sandalwood Plantations in Australia, in *Materials Horizons: From Nature to Nanomaterials*, 143–147.
- Putri, K. P., D. Syamsuwida, R. Kurniaty, E. Suita dan Dharmawati F. D. (2015). Peran Perbenihan Dalam Peningkatan Produktivitas Hutan Penghasil Energi dan Obat-Obatan di Provinsi Lampung. *Prosiding: Seminar Hasil Penelitian Balai Penelitian Teknologi Perbenihan Tanaman Hutan Balai Penelitian Kehutanan Palembang*. Bandar Lampung.
- Putri, Y. R., Indrioko, S., & Ratnaningrum, Y. W. N. (2020). Genetic Diversity of Sandalwood in Imogiri, Gunung Sewu. In *IOP Conference Series: Earth and Environmental Science* (Vol. 449, No. 1, p. 012036). IOP Publishing.
- Rachmat, H. H., Pamoengkas, P., Rahmatullah, R. K., & Susilowati, A. (2021). Valuation of a Man-Made Dipterocarp Forest as Seed Source for Shorea Red Meranti (Dipterocarpaceae). In *IOP Conference Series: Earth and Environmental Science* (Vol. 713, No. 1, p. 012031). IOP Publishing.
- Rachmad, K. I., (2016). Karakteristik Mutu Fisik dan Fisiologis Benih Cendana (Santalum album Linn.) Dari Permudaan Alam di Desa Nglanggeran dan Desa Petir Kabupaten Gunungkidul. Skripsi S1. Fakultas Kehutanan. Universitas Gadjah Mada. Yogyakarta.
- Ramadhan, R. (2023). Evaluasi Potensi Produksi Benih pada Pertanaman Uji Keturunan Half-Sib Eboni (*Diospyros celebica*) di KHDTK Wanagama untuk Konversi Menjadi Sumber Benih. Skripsi. Fakultas Kehutanan, Universitas Gadjah Mada. Yogyakarta.
- Rao, M. N., Ganeshiah, K. N, Shaanker, R. U. (2007). Assessing Threats and Mapping Sandal Resources to Identify Genetic ‘Hot-Spot’ for In-Situ Conservation in Peninsular India. *Conservation Genetics*.
- Ratnaningrum YWN, Indrioko S. (2014). Variation on genotypes and flowering characters affecting pollination mechanisms of sandalwood (Santalum album Linn., Santalaceae) planted on ex-situ gene conservation in Yogyakarta, Indonesia. *Eur J For Res* 6: 167-179.
- Ratnaningrum, Y.W.N., Indrioko, S., Faridah, E; Syahbudin, A. (2015). The Effects of Population Size on Genetic Parameters and Mating System of Sandalwood in Gunung Sewu, Indonesia. *Indonesian Journal of Biotechnology*. XX (2).
- Ratnaningrum, Y. W. N., Indrioko, S., Faridah, E., Syahbudin, A. (2017a). Gene Flow and Selection Evidence of Sandalwood Under Various Population

- Structures in Gunung Sewu (Java, Indonesia), and Its Effect on Genetic Differentiation. *Biodiversitas* 18 (4): 1493-1505.
- Ratnaningrum, Y. W. N., Indrioko, S., Faridah, E., & Syahbudin, A. (2017b). Variasi Karakter Pembungaan antar Varian dan Ras Lahan Cendana Sepanjang Gradien Geografis di Gunung Sewu (The Flowering Characters Variation Among Floral Variants and Landraces Along Geographical Gradients in Gunung Sewu). *Jurnal Ilmiah Kehutanan*, 11(2).
- Ratnaningrum Y. W. N., Indrioko S, Faridah E, Syahbudin A. (2018). Population Structures and Seasons Affected Flowering, Pollination and Reproductive Outputs of Sandalwood in Gunung Sewu, Java, Indonesia. *Nusantara Biosci* 10 (1): 12-26.
- Ratnaningrum, Y. W. N., Indrioko, S., Setiahadhi, R., & Lilianawati, B. (2019). Floral Structures Affect on Pollination Events of Sandalwood in Four Landraces Along Landscape Gradients in Gunung Sewu, Java, Indonesia. In *IOP Conference Series: Earth and Environmental Science* (Vol. 347, No. 1, p. 012093). IOP Publishing.
- Ratnaningrum, Y., Indrioko, S., Karrin, A., Kurniawan, A., & Putri, A. D. (2021). The genetic diversity and reproductive dynamics of sandalwood in Gunung Sewu (Java, Indonesia) in 2012-2019: designing conservation strategies in a continuous versus fragmented landrace. *Biodiversitas Journal of Biological Diversity*, 22(8).
- Ratnaningrum, Y. W. N., Faridah, E., Utama, I. N., & Prastyo, B. (2022). Establishing Breeding House of Superior Sandalwood in Gunung Sewu, Indonesia: Preserving the 27 Selected Genotypes Grafted Into Two Types of Rootstocks. *Biodiversitas Journal of Biological Diversity*, 23(7).
- Santoso, H. (2011). Kebijakan Sumber Benih dan Potensi Kebutuhan Benih Untuk Mendukung Penanaman Satu Milyar Pohon. In A. Rimbawanto, B. Leksono, & A. Y. P. B. C. Widyatmoko (Eds.), *Prosiding Seminar Nasional Pembangunan Sumber Benih; Peran Sumber Benih Unggul dalam mendukung Keberhasilan Penanaman Satu Milyar Pohon* (pp. 67–78). Yogyakarta: Balai Besar Penelitian Bioteknologi dan Pemuliaan Tanaman Hutan.
- Sawiyati, K. A. (2019). *Mutu Fisik dan Fisiologis Benih dari Tiga Tipe Induk Cendana (*Santalum album* Linn.) Di Desa Petir, Kecamatan Rongkop, Kabupaten Gunung Kidul*. Skripsi S1. Fakultas Kehutanan. Universitas Gadjah Mada. Yogyakarta.
- Silaholo, S. C. P. (2021). Evaluasi Fenotip dan Potensi Produksi Benih Pada Tegakan Hasil Permudaan Alam Mahoni di Wanagama Untuk Konversi Menjadi Sumber Benih. Skripsi. Fakultas Kehutanan, Universitas Gadjah Mada. Yogyakarta.
- Sudrajat, D. J., Nurhasyabi dan Bramasto, Y. (2015). *Standar Pengujian dan Mutu Benih Tanaman Hutan*. Bogor: FORDA Press
- Takeuchi, Y., Kikuchi, S., & Diway, B. (2020). Albinism and Inbreeding Depression in Seedlings of The Tropical Tree, *Shorea laxa*. *Journal of Forest Research*, 25(6), 413–419.
- Telem, R. S., Sadhukhan, R., Sarkar, H. K., Akoijam, R., Haribhushan, A., & Wani, S. H. (2017). Genetic Studies for Flower Yield and Component Traits in *Chrysanthemum morifolium* Ramat. *Journal of Applied and Natural*

*Science*, 9(1), 211.

- Tsakif, S. (2024). *Evaluasi Fenotip dan Potensi Produksi Benih Pada Tegakan Kemiri (*Aleurites moluccana (L.) WILD.*) di KHDTK Wanagama Untuk Konversi Menjadi Sumber Benih*. Skripsi. Fakultas Kehutanan, Universitas Gadjah Mada. Yogyakarta.
- Turner M.G., D.M Turner., W.H. Romme dan D.B. Tinker. 2007. Cone production in young post-fire *Pinus contorta* stands in Greater Yellowstone (USA). *For Ecol Manage* 242: 119 - 126
- Varghese, M., Nicodemus, A., dan Nagarajan, B. (2003). Fertility Variation and Dynamics of Two Clonal Seed Orchards of Teak. *Proceeding on Seminar of Quality Timber Products of Teak from Sustainable Forest Management*: 338- 346.
- Viglas J.N., C.D. Brown, dan J.F. Johnstone. (2013). Age and size effects on seed productivity of northern black spruce. *Can. J. For. Res.* 43: 534–543
- Wawo, A. H. (2008). Studi Perkecambah Biji dan Pola Pertumbuhan Semai Cendana (*Santalum album L*) dari Beberapa Pohon Induk di Kabupaten Belu, NTT. *BIODIVERSITAS* Vol. 9, No. 2, hal. 117-122.
- Widajati, E., Murniati, E., Palupi, E. R., Kartik, T., Suhartanto, M. R., Qadir, A. (2014). *Dasar Ilmu dan Teknologi Benih*. IPB Press. Bogor.
- Widowangi. (2022). Performa Anakan Cendana dari Tiga Tipe Induk dengan Keragaman Genetik Berbeda di Desa Petir Gunung Sewu. Skripsi. Fakultas Kehutanan, Universitas Gadjah Mada. Yogyakarta.
- Wirakarsa, I.S. (2016). *Potensi Permudaan Alam dan Keragaman Genetik Cendana (*Santalum album Linn.*) di Desa Petir Kecamatan Rongkop Kabupaten Gunungkidul*. Thesis. Program Pascasarjana Fakultas Kehutanan. Universitas Gadjah Mada. Yogyakarta.
- Yulianti, Siregar IZ, Wijayanto N, Darma IGKT, Syamsuwida D. (2011). Genetic variation of *Melia azedarach* in community forests of West Java assessed by RAPD. *J Biodiversitas*. 12(2):64-69.