



DAFTAR PUSTAKA

- Adibah, A.B., P.L. Liew., S.G. Tan., Q.Z. Faridah., A. Christianus. 2012. Development of single-locus DNA microsatellite markers using 5 anchored ISSR-PCR method for the mangrove horseshoe crab, *Carcinoscorpius rotundicauda* (Latreille, 1802) in Peninsular Malaysia. *Molecular Biology Reports* 39: 3815-3820.
- Aguilera, J.G., L.A. Pessoni., G.B. Rodrigues., A.Y. Elsayed., D.J.H. Silva., E. G. Barros. 2011. Genetic variability by ISSR markers in tomato (*Solanum lycopersicon* Mill.). *Revista Brasileira de Ciências Agrárias* 6(2): 243-252.
- Ali, Z., S.H. Ganie., A. Narula., M.P. Sharma., P.S. Srivastava. 2013. Intra-specific genetic diversity and chemical profiling of different accessions of *Clitoria ternatea* L. *Industrial Crops and Products* 43: 768–773.
- Al-Samarai, F.R and A.A. Al-Kazaz. 2015. Molecular markers: an introduction and applications. *Eur. J. Mol. Biotechnol.* 9(3): 118-130.
- Angriani, L. 2019. Potensi ekstrak bunga telang (*Clitoria ternatea*) sebagai pewarna alami lokal pada berbagai industri pangan. *Canrea Journal* 2(1): 32-37.
- Aziza, V., T.A. Ulimaz., D. Ustari., T. Suganda., V. Concibido., B. Irawan., A. Karuniawan. 2021. Keragaman fenotipik bunga telang *double petal* asal Indonesia dan Thailand berdasarkan morfologi bunga. *Jurnal Biologi* 14(1): 78-89.
- Azmat, M.A., I.A. Khan., H.M.N. Cheema., I.A. Rajwana., A.S. Khan., A.A. Khan. 2012. Extraction of DNA suitable for PCR applications from mature leaves of *Mangifera indica* L. *J. Zhejiang Univ-Sci.* 13(4): 239-243.
- Azmi, I. 2020. Analisis hasil elektroforesis DNA dengan *image processing* menggunakan metode *gaussian filter*. Universitas Jember. Skripsi.
- Balitetro litbang. 2021. Selain Cantik Ini Segudang Manfaat Bunga Telang <<https://balitetro.litbang.pertanian.go.id/?p=7264&lang=en>>. Diakses 24 Desember 2021.
- Barut, M., M.A. Nadeem., T. Karaköy., F.S. Baloch. 2020. DNA fingerprinting and genetic diversity analysis of world quinoa germplasm using iPBS-retrotransposon marker system. *Turkish Journal of Agriculture and Forestry* 44: 479-491.



Bhandari, H.R., A.N. Bhanu., K. Srivastava., M.N. Singh., A. Hemantaranjan. 2017.

Assessment of genetic diversity in crop plants - an overview. *Adv. Plants Agric. Res.* 7: 279-286.

Birgit, R., K. Anja., M. Kristin., B. Marie., W. Beatrice., H. Tony., S. Kathrin., T. Ute., M. Matthias., W. Heino., S. Thomas., K. Doris. 2021. Application of retrotransposon-based Inter-SINE Amplified Polymorphism (ISAP) markers for the differentiation of common poplar genotypes. *Canadian Journal of Forest Research* 1-50.

Bishoyi, A.K., V.V. Pillai., K.A. Geetha., S. Maiti. 2014. Assessment of genetic diversity in *Clitoria ternatea* populations from different parts of India by RAPD and ISSR markers. *Genet Resour Crop Evol.* 61: 1597-1609.

Chaveerach, A., T. Alongkod., S. Runglawan., T. Tawatchai. 2006. Genetic diversity among geographically separated populations of *Nepenthes mirabilis*. Springer 61(3): 295-298.

Desai, P., B. Gajera., M. Mankad., S. Shah., A. Patel., G. Patil., S. Narayanan., N. Kumar. 2015. Comparative assessment of genetic diversity among Indian bamboo genotypes using RAPD and ISSR markers. *Mol Biol Rep* 42: 1265-1273.

Diekmann, K., K.M. Seibt., K. Muders., T. Wenke., H. Junghans., T. Schmidt., K.J. Dehmer. 2017. Diversity studies in genetic resources of *Solanum* spp. (section Petota) by comparative application of ISAP markers. *Genet Resour Crop Evol* 64:1937-1953.

Edris, S., S. Abo-Aba., M.M. Algandaby., A.M. Ramadan., N.O. Gadalla., M.A. Al-Kordy., J.S.M. Sabir., F.M. El- Domyati., A.M. Alzhairy., A. Bahieldin. 2014. Molecular characterization of tomato cultivars grown in Saudi Arabia and differing in earliness of fruit development as revealed by AFLP and ISSR. *Life Science Journal* 11(8): 602-612.

Fitriani, L. 2019. Deteksi resistensi *Aedes aegypti* terhadap sipermetrin menggunakan teknik *polymerase chain reaction* (PCR) di Ambarawa Kabupaten Semarang tahun 2019. Universitas Negeri Semarang. Skripsi.

Firdausi dan B. Waluyo. 2021. Karakterisasi dan penilaian variabilitas morfologi bunga telang (*Clitoria ternatea L.*) asal Pulau berbeda di Indonesia. *Jurnal Produksi Tanaman* 9(3): 177-182.



- Fisher, P.J., R.C. Gardner., T.E. Richardson. 1996. Single locus microsatellites isolated using 5 anchored PCR. Nucleic Acids Research 24: 4369-4371.
- Fracaro, F and S Echeverrigaray. 2006. Genetic variability in *Hesperozygis ringens* Benth. (Lamiaceae), an endangered aromatic and medicinal plant of Southern Brazil. Biochemical genetics 44: 479-490.
- Gomez, S.M. and A. Kalamani. 2003. Butterfly pea (*Clitoria ternatea*): A nutritive multipurpose forage legume for the tropics—An overview. Pakistan Jurnal of Nutrition 2(6): 374-379.
- Gusmiaty., M. Restu., Asrianny, S.H. Larekeng. 2016. Polimorfisme penanda RAPD untuk analisis keragaman genetik *Pinusmerkusii* di Hutan Pendidikan Unhas. Jurnal Natur Indonesia 16(2): 47-53.
- Hariadi, H., M. Sunyoto., B. Nurhadi., A. Karuniawan. 2018. Comparison of phytochemical characteristics pigmen extract (antosianin) sweet purple potatoes powder (*Ipomoea batatas* L.) and clitoria flower (*Clitoria ternatea*) as natural dye powder. Journal of Pharmacognosy and Phytochemistry 7(4): 3420-3429.
- Havananda, T and K. Luengwilai. 2019. Variation in floral antioxidant activities and phytochemical properties among butterfly pea (*Clitoria ternatea* L.) germplasm. Genetic Resources and Crop Evolution 66: 645-658.
- Henareh, M., A. Dursun., B.A. Mandoulakani., K. Haliloğlu. 2016. Assessment of genetic diversity in tomato landraces using ISSR markers. Genetika 48(1): 25-35.
- Henry, R.J. 2013. Molecular markers in plants. WileyBlackwell, Ames, IA. pp 200.
- Hidayati, N.Z., D. Saptadi., L. Soetopo. 2016. Analisis hubungan kekerabatan 20 spesies anggrek *Dendrobium* berdasarkan karakter morfologi. Jurnal Produksi Tanaman 4(4): 291-297.
- Joshi, M and J.D. Deshpande. 2010. Polymerase chain reaction: methods, principles and application. International Journal of Biomedical Research 1(5): 81-97.
- Lian, C., Z. Zhou and T. Hogetsu. 2001. A simple method for developing microsatellite markers using amplified fragments of inter-simple sequence repeat (ISSR). Journal of Plant Research 114: 381-385.
- Luz, G.C., D.K. Strioto., C.A. Mangolin., M.D.F.P.S. Machado. 2020. ISSR markers to assess genetic diversity of cultivated populations from artificial selection of *Stevia rebaudiana* (Bert.) Bertoni. Breeding Science 70: 508-514.



- Ma S., M. Khayatnezhad., A.A. Minaifar. 2021. Genetic diversity and relationships among *Hypericum L.* species by ISSR Markers: A high value medicinal plant from Northern of Iran. *Caryologia* 74(1): 97-107.
- Maulana, H., H.N. Prayudha., Y. Liberty., R.S. Mulyani., D. Ustari., S. Dewayani., E. Solihin., A. Karuniawan. 2018. Variabilitas genetik F1 *Orange Fleshed Sweet Potato* (Ofsp) asal Peru di Jatinangor berdasarkan karakter agromorfologi. *Zuriat* 29(2): 88-94.
- Naik, A., A.K. Patel., S.K. Mishra., A. Nag, J. Panigrahi. 2019. Characterization of intraspecific hybrid in *Clitoria ternatea* (L.) using morphophysiological, cytogenetic, metabolic and molecular markers. *International Journal of Cytology, Cytosystematics and Cytogenetics* 72(3): 11-22.
- Ng, W.L and S.G. Tan. 2015. Inter-Simple Sequence Repeat (ISSR) Markers: Are We Doing It Right?. *ASM Sci. J* 9(1): 30-39.
- Nuraida, D. 2012. Pemuliaan tanaman cepat dan tepat melalui pendekatan marka molekuler. *El-Hayah* 2(2): 97-103.
- Pardal, S.J., V.R. Rahayu., K. Nugroho., Suharsono. 2020. Analisis keragaman genetik galur kedelai transgenik toleran cekaman aluminium dan varietas non transgenik berdasarkan marka *simple sequence repeat* (SSR). *Penelitian Pertanian Tanaman Pangan* 4(3): 171-177.
- Peng, B., Y. Zhang., X. Sun., M. Li., J. Xue., Y. Hang. 2017. Genetic relationship and identification of *Dioscorea polystachya* cultivars accessed by ISAP and SCAR markers. *Arch Biol Sci.* 69(2): 277-284.
- Rajasekharan, P.E., V.K. Kareem., B.S. Ravish., S. Mini. 2016. Analysis of genetic diversity in *Alpinia galanga* using ISSR markers. *Indian Journal of Plant Genetic Resources* 29(2): 194-198.
- Ramesh, P., G. Mallikarjuna., S. Sameena., A Kumar., K. Gurulakshmi., B. Reddy., P.C.O. Reddy., A.C. Sekhar. 2020. Advancements in molecular marker technologies and their applications in diversity studies. *J Biosci* 45:123.
- Ray, A., S. Jena., T. Halder., A. Sahoo., B. Kar., J. Patnaik., B. Ghosh., P.C. Panda., N. Mahapatra., S. Nayak. 2019. Population genetic structure and diversity analysis in *Hedychium coronarium* populations using morphological, phytochemical and molecular markers. *Industrial Crops and Products* 132: 118-133.



- Rifqi, M. 2021. Ekstraksi antosianin pada bunga telang (*Clitoria ternatea L.*): sebuah ulasan. Pasundan Food Technology Journal (PFTJ) 8(2): 45-50.
- Rohlf, F.J. 2001. NT SYS-pc: Numerical Taxonomy and Multivariate Analysis System Version 2.1. User Guide. Departemen of Ecology and Evolution State University of New York.
- Rokhman, F. 2007. Aktivitas Antibakteri Filtrat Bunga Teleng (*Clitoria ternatea L.*) Terhadap Bakteri Penyebab Konjungtivitas. Bogor (ID): Institut Pertanian Bogor.
- Saputri, T.Y., S. Hikam., P.B. Tomotiwu. 2013. Pendugaan komponen genetik, daya gabung, dan segregasi biji pada jagung manis kuning kisut. J. Agrotek Tropika 1(1): 25-31.
- Schulmann, A.H. 2007. Molecular markers to assess genetic diversity. Euphytica 158: 313-321.
- Seibt, K.M., T. Wenke., C. Wollrab., H. Junghans., K. Muders., K.J. Dehmer., K. Diekmann., T. Schmidt. 2012. Development and application of SINE-based markers for genotyping of potato varieties. Theor Appl Genet 125:185-196.
- Seibt, K.M., T. Wenke., K. Muders., B. Truberg., T. Schmidt. 2016. Short interspersed nuclear elements (SINEs) are abundant in Solanaceae and have a family-specific impact on gene structure and genome organization. Plant J 86: 268-285.
- Shahlaei, A., S. Torabi and M. Khosroshahli. 2014. Efficiency of SCoT and ISSR markers in assessment of tomato (*Lycopersicum esculentum* Mill.) genetic diversity. International Journal of Biosciences 5(2): 14-22.
- Sharma, P., S. Tiwari., N. Tripathi., A.K. Mehta. 2016. Polymorphism analysis in advanced mutant population of oat (*Avena sativa L.*) using ISSR markers. Physiol Mol Biol Plants 22(1): 115-120.
- Singh, P.K., H. Sharam., N. Srivastava and S.S. Bhagyawant. 2014. Analysis of genetic diversity among wild and cultivated chickpea genotypes employing ISSR and RAPD markers. American Journal of Plant Sciences 5: 676-682.
- Son, J.H., K.C. Park., S. Lee., J.H. Kim., M.S. Kim. 2012. Species relationship among *Allium* species by ISSR analysis. Hortic. Environ. Biothechnol. 53: 256-262.
- Sormin, S.Y.M., A. Purwantoro., A.B. Setiawan., C.H. Teo. 2021. Application of inter-SINE amplified polymorphism (ISAP) markers for genotyping of *Cucumis melo* accessions and its transferability in *Coleus* spp. Biodiversitas 22(5): 2918-2929.



- Suarna, I.W. 2005. Kembang Telang (*Clitoria ternatea*) Tanaman Pakan Dan Penutup Tanah. Prosiding Lokakarya Nasional Tanaman Pakan Ternak. Puslitbang Peternakan.
- Suebkhampet, A. and P. Sotthibandhu. 2012. Effect of using aqueous crude extract from butterfly pea flowers (*Clitoria ternatea* L.) as a dye on animal blood smear staining. Journal of Science and Technology 19(1): 15-19.
- Sulassih., Sobir., E. Santosa. 2013. Phylogenetic analysis of mangosteen (*Garcina mangostana* L.) and its relatives based on morphological and Inter Simple Sequence Repeat (ISSR) markers. SABRAO J. 45: 478-490.
- Sulistiyorini, I., R. Rubiyo, S. Sudarsono. 2018. Evaluasi keseragaman klonal pada enam klon kakao unggul berdasarkan marka SSR. Jurnal Tanaman Industri dan Penyegar 5(3): 135-144.
- Sulistiyawati, P., dan A.Y.P.B.C. Widyatmoko. 2017. Keragaman genetik populasi kayu merah (*Pterocarpus indicus* Willd) menggunakan penanda Ramdom Amplified Polymorphism DNA. Jurnal Pemuliaan Tanaman Hutan 11(1): 67-76.
- Sutedi, E. 2013. Potensi kembang telang (*Clitoria ternatea*) sebagai tanaman pakan ternak. Wartazzo 23: 51-62.
- Tomlekova, N., V. Spasova-Apostolova., E. Nacheva., M. Stoyanova., A. Teneva., N. Petrov., T. Schmidt. 2017. Genotyping of bulgarian potato varieties by sine-based ISAP markers. Comptes rendus de l'Académie bulgare des Sciences biologie genetique 70(1): 53-62.
- Ulimaz, T.A., D. Ustari., V. Aziza., T. Suganda., V. Concibido., J. Levita., A. Karuniawan. 2020. Keragaman genetik bunga telang (*Clitoria ternatea*) asal Indonesia berdasarkan karakter bunga dan komponen hasil pada dua lahan berbeda. Jurnal AgroBiogen 16(1): 1-6.
- Uma, B., K. Prabhakar., S. Rajendran. 2009. Phytochemical analysis and antimicrobial activity of *Clitorea ternatea* linn against extended spectrum beta lactamase producing enteric and urinary pathogens. Asian Journal of Pharmaceutical and Clinical Research 2(4): 94-96.
- Vankar, P.S. and J. Srivastava. 2010. Evaluation of anthocyanin content in red and blue flowers. International Journal of Food Engineering 6(4): 1-11.



Varshney, R.K., K. Chabane., P.S. Hendre., R.K. Aggarwal., A. Graner. 2007.

Comparative assessment of EST-SSR, EST-SNP and AFLP markers for evaluation of genetik diversity and conservation of genetik resources using wild cultivated and elite barleys. Plant Sci. 173: 638-649.

Wahyuni, D.I. 2018. The Unity Color of Kembang Telang. Karya Ilmiah Institut Seni Indonesia Denpasar.

Wang, L., R. Guan., L. Zhangdong., R. Chang., L. Qiu. 2005. Genetic diversity of classic cultivated soybean revealed by SSR markers. Crop Sciences 46(1): 1032-1038.

Wenke, T., K.M. Seibt., T. Döbel., K. Muders., T. Schmidt. 2015. Inter-SINE Amplified Polymorphism (ISAP) for rapid and robust plant genotyping. Batley J, (ed). Springer, New York.

Wenke, T., T. Dobel., T.R. Sorensen., H. Junghans., B. Weisshaar., T. Schmidt. 2011. Targeted identification of short interspersed nuclear element families shows their widespread existence and extreme heterogeneity in plant genomes. Plant Cell 23: 3117-3128.

Yeotkar, S.D., S.N. Malode., V.N. Waghmare., P. Thakre. 2011. Genetic relationship and diversity analysis of *Clitoria ternatea* variants and *Clitoria biflora* using random amplified polymorphic DNA (RAPD) markers. African Journal of Biotechnology 10(79): 18065-18070.

Yue, W., G. Zixia., C. Min., Z. Yanmei., S. Xiaoqin., Z. Yifeng., B. Peng. 2022. Genetic relationship and species identifcation of *Dioscorea polystachya* Turcz. in Yams determined by ISSR, ISAP, SRAP and SCAR markers. Genet Resour Crop Evol 69: 1953-1964.

Yulita, K.S., F. Ahmad., D. Martanti., Y.S. Poerba., Herlina. 2014. Analisis keragaman genetik kentang hitam [*Plectranthus rotundifolius* (Poiret) Sprengel] berdasarkan marka ISSR dan RAPD.

Zheng, Y., S. Xu, J. Liu, Y. Zhao, J. J. 2017. Genetic diversity and population structure of Chinese natural bermudagrass [*Cynodon dactylon* (L.) Pers.] germplasm based on SRAP markers. PloS One 12(5): 1-15.

Zingare, M.L., P.L. Zingare., A.K. Dubey., M.A. Ansari. 2013. *Clitoria ternatea* (APARAJITA): A Review of the antioxidant, antidiabetic and hepatoprotective potential. International Journal of Pharmacy and Biological Science 3(1):201-213.