DAFTAR PUSTAKA

Al Afghani, F. (2022). Mutan potensial pada pertumbuhan tanaman krisan dengan iradiasi sinar gamma. In *Prosiding Seminar Nasional Pembangunan Dan Pendidikan Vokasi Pertanian* (Vol. 3, No. 1, pp. 537-545). https://doi.org/10.47687/snppvp.v3il.337

Aisyah, S. I., Aswidinnoor, H., Saefuddin, A., Marwoto, B., & Sastrosumarjo, S. (2009). Induksi mutasi pada stek pucuk anyelir (*Dianthus caryophyllus* Linn.) melalui iradiasi sinar gamma. *Jurnal agronomi Indonesia, 37*(1): 62-70. https://doi.org/10.24831/jai.v37i1.1396.

Alberts, B., Johnson, A., Lewis, J., Raff, M., Roberts, K., & Walter, P. (2002). Integrins. In *Molecular Biology of the Cell. 4th edition*. Garland Science.

Albokari, M. M. A., Alzahrani, S. M., & Alsalman, A. S. (2012). Radiosensitivity of some local cultivars of wheat (*Triticum aestivum* L.) to gamma irradiation. *Bangladesh Journal of Botany*, *41*(1), 1-5. https://doi.org/10.3329/bjb.v41i1.11075

Alfariatna, L., Kusmiyati, F., & Anwar, S. (2018). Karakter fisiologi dan pendugaan heritabilitas tanaman M1 bawang merah (*Allium ascalonicum* L.) hasil induksi iradiasi sinar gamma. *Journal of agro complex*, *2*(1), 19-28: https://doi.org/10.14710/joac.2.1.19-28.

Anjarsari, I. R. D., Hamdani, J. S., Suherman, C., Nurmala, T., Khomaeni, H. S., & Rahadi, V. P. (2021). Studi pemangkasan dan aplikasi sitokinin-giberelin pada tanaman I (*Camellia sinensis* (L.) O. Kuntze) produktif klon GMB 7. *Jurnal Agronomi Indonesia (Indonesian Journal of Agronomy)*, *49*(1), 89-96.

Anne, S., & Lim, J. H. (2021). Variability of *chrysanthemum* cultivars induced by gamma irradiation. *Horticultural science and technology*, *39*(5), 660-672. https://doi.org/10.7235/HORT.20210059.

Arumingtyas, E. L. (2016). *Genetika mendel:* Prinsip dasar pemahaman ilmu genetika. Universitas brawijaya press, Hlm. 81.

Astuti, Y. T. M., & Andayani, N. (2005). Pengaruh Pemberian BAP dan NAA terhadap Pertumbuhan Krisan (*Chrysanthemum morifolium*, Ram.) dalam Kultur Jaringan. *Biota: Jurnal Ilmiah Ilmu-Ilmu Hayati*, 31-35.

Badan Penelitian dan Pengembangan Pertanian. (2018). 600 Teknologi inovatif pertanian. Jakarta, IAARD Press, Hlm. 204-210.

Badan Pusat Statistik (BPS). (2024). Statistik hortikultura. *Badan pusat statistic.* Jakarta.

Bhojwani, S. S., & Dantu, P. K. (2013). Plant tissue culture: an introductory text (Vol. 318). India: Springer, Hlm. 27-80.

Chen, X., Zhou, X., Xi, L., Li, J., Zhao, R., Ma, N., & Zhao, L. (2013). Roles of DgBRC1 in regulation of lateral branching in chrysanthemum (*Dendranthema grandiflora* cv. Jinba). *PloS One*, *8*(4), e61717. https://doi.org/10.1371/journal.pone.0061717.

Chowdhury, J., Hoque, M. I., & Sarker, R. H. (2023). Evaluation of the effect of different doses of gamma radiation to induce variation in in vitro raised plants of *Chrysanthemum. Plant tissue culture and biotechnology*, *33*(2), 155-165. https://doi.org/10.3329/ptcb.v33i2.70475.

Damayanti, F. (2021). Potensi pemuliaan mutasi radiasi sebagai upaya peningkatan variasi genetik pada tanaman hias. *EduBiologia: Biological Science and Education Journal*, *1*(2), 78-84.

Din, A., Qadri, Z. A., Wani, M. A., Rather, Z. A., Iqbal, S., Malik, S. A., & Nazki, I. T. (2020). Congenial in vitro γ-ray-induced mutagenesis underlying the diverse array of petal colours in chrysanthemum (*Dendranthema grandiflorum* kitam) cv."Candid". In *Biology and Life Sciences Forum* (Vol. 4, No. 1, p. 21). MDPI.

Dumanović, J., Nepovimova, E., Natić, M., Kuča, K., & Jaćević, V. (2021). The significance of reactive oxygen species and antioxidant defense system in Plants: A Concise Overview. *Frontiers in plant science*, *11*, 552969. https://doi.org/10.3389/fpls.2020.552969.

Dwimahyani, I. (2007). Pengaruh iradiasi sinar gamma terhadap pertumbuhan dan pembungaan stek pucuk krisan (*Chrysanthemum morifolium* Ramat.) cv. Pink Fiji. *Jurnal ilmiah aplikasi isotop dan radiasi*, *3*(1). http://dx.doi.org/10.17146/jair.2007.3.1.554.

Ekawati, Y., Anggraeni, A., Dyah Prawestri, A., & Nurtjahya, E. (2022). Induksi kalus sisik umbi *Lilium longiflorum* Thunb. oleh auksin dan sitokinin, serta respons pertumbuhannya secara *in vitro*. *Agrosaintek: Jurnal Ilmu dan Teknologi Pertanian*, *6*(2), 28–37. https://doi.org/10.33019/agrosainstek.v6i2.316

Fauziah, S. M. (2017). Deteksi keragaman genetik menggunakan penanda ISSR (*Inter Simple Sequence Repeat*) dan keragaman fenotip pada tanaman krisan (*Dendranthema grandiflora* Tzvelev) varietas Pink Fiji yang diinduksi dengan EMS (*Ethyl Methanesulfonate*) secara *in vitro.*

Gibbs, P. E. (2014). Late acting self-incompatibility the pariah breeding system in flowering plants. *New phytologist, 203(3),717–734.* https://doi.org/10.111/nph/12874.

Gill, S. S., and Tuteja, N. (2010). Reactive oxygen species and antioxidant machinery in abiotic stress tolerance in crop plants. *Plant Physiol. Biochem.* 48, 909–930. https://doi.org/10.1016/j.plaphy.2010.08.016

George, E. F., & Sherrington, P. D. (1984). Plant propagation by tissue culture (pp. 709-pp).

Gupta, N. V., & Shukshith, K. S. (2016). Qualification of autoclave. *International Journal of pharmation techonolgy research*, *9*(4), 220-226.

Hartanto, R., Fitri, S. R., Kawiji, K., Prabawa, S., Sigit, B., & Yudhistira, B. (2021). analisis fisik, kimia dan sensoris teh bunga krisan putih (*Chrysanthemum morifolium* Ramat.) dengan pengeringan kabinet. *Agrointek: Jurnal teknologi industry pertanian*, *15*(4), 1011-1025. https://doi.org/10.21107/agrointek.v15i4.10531.

Hasbullah, N. A., Taha, R. M., Saleh, A., & Mahmad, N. (2012). Irradiation effect on in vitro organogenesis, callus growth and plantlet development of *Gerbera jamesonii. Horticultura brasileira*, *30*, 252-257. https://doi.org/10.1590/S0102-05362012000200012.

Indrayanti, R., Mattjik, N. A., & Setiawan, A. (2012). Evaluasi keragaman fenotipik pisang cv. ampyang hasil iradiasi sinar gamma di rumah kaca. *Jurnal Hortikultura Indonesia (JHI)*, *3*(1), 24-34. https://doi.org/10.29244/jhi.3.1.24-34

Julianti, M. A., Darmanti, S., & Haryanti, S. (2024). Karakteristik stomata dan trikoma lima spesies gulma familia Asteraceae di waduk pendidikan Universitas Diponegoro. *Buletin Anatomi dan Fisiologi*, *9*(1), 39-47.

Jun, S. Y., Sattler, S. A., Cortez, G. S., Vermerris, W., Sattler, S. E., & Kang, C. (2018). Biochemical and Structural Analysis of Substrate Specificity of a Phenylalanine Ammonia-Lyase. *Plant physiology*, *176*(2), 1452–1468. https://doi.org/10.1104/pp.17.01608

Kamisah, N., & Hafsah, H. (2023). Aplikasi ekstrak pegagan (*Centella Asiatica*) dan kombinasi BAP pada media kultur krisan (*Chrysanthemum* Sp.) Var. Arshanti. *Jurnal Biosains Medika*, *1*(2), 77-84.

Kashif Waseem, K. W., Jilani, M. S., Khan, M. S., Mehwish Kiran, M. K., & Ghazanfarullah Khan, G. K. (2011). Efficient in vitro regeneration of chrysanthemum (*Chrysanthemum morifolium* L.) plantlets from nodal segments.

Kim, Y. S., Sung, S. Y., Jo, Y. D., Lee, H. J., & Kim, S. H. (2016). Effects of gamma ray dose rate and sucrose treatment on mutation induction in *Chrysanthemum*. *European journal horticulture. Sci*, *81*(4), 212-218. http://dx.doi.org/10.17660/eJHS.2016/81.4.4.

Koryati, T., Ningsih, H., Erdiandini, I., Paulina, M., Firgiyanto, R., Junairiah, J., & Sari, V. K. (2022). Pemuliaan tanaman. Hlm. 18-20.

Kurniasih, D., Ruswandi, D., Karmana, M. H., & Qosim, W. A. (2016). Variabilitas genotipe-genotipe mutan krisan (*Dendranthema grandiflora* Tzvelv.) generasi MV5 hasil irradiasi sinar gamma. *Jurnal agrikultura*, *27*(3), 173-178. https://doi.org/10.24198/agrikultura.v27i3.10881.

Kumari, K., Dhatt, K. K., & Kapoor, M. A. N. I. S. H. (2013). Induced mutagenesis in *Chrysanthemum morifolium* variety 'Otome Pink' through gamma irradiation. *The Bioscan*, *8*(4), 1489-1492.

Lestari, E. G. (2011). Peranan zat pengatur tumbuh dalam perbanyakan tanaman melalui kultur jaringan. *Jurnal agrobiogen*, *7*(1), 63-68. https://doi.org/10.21082/jbio.v7n1.2011.p63-68.

Lestari, E. G. (2016). Pemuliaan tanaman melalui induksi mutasi dan kultur *in vitro*.Lestari, E. G. (2021). Aplikasi induksi mutasi untuk pemuliaan tanaman hias. *Berita biologi*, *21*(3), 335-344.

Lintong, R. T. J., Mandang, J. P., & Lengkong, E. F. (2022). Pertumbuhan dan morfogenesis krisan (*Chrysanthemum Morifolium*) Kulo dengan eksplan pucuk dan nodus pada media ms yang diberi *benzil amino purin* (BAP). *Agrisosioekonomi*, *18*(1), 239-246. https://doi.org/10.35791/agrsosek.v18i1.55205.

Lydianthy, H. (2019). Pengaruh penggunaan zat pengatur tumbuh BAP dan NAA Terhadap Presentase Tumbuh Bahan Tanam Krisan *(Chrysanthemum morifolium) secara In vitro*.

Mahadi, I., I.W. Syafi', & Y. Sari. 2016. Induksi kalus jeruk kasturi (*Citrus microcarpa*) menggunakan hormon 2,4-D dan BAP dengan metode in vitro. *Jurnal Ilmu Pertanian Indonesia (JIPI)* 21 (2): 84-89.

Maharani, S., & Khumaida, N. (2013). Induksi keragaman dan karakterisasi dua varietas krisan (*Dendranthema grandiflora* Tzvelev) dengan iradiasi sinar gamma secara *in vitro*. *Jurnal hortikultura Indonesia*, *4*(1), 34-43. https://doi.org/10.29244/jhi.4.1.34-43.

Majeed, A., Muhammad, Z., Ullah, R., & Ali, H. (2018). Gamma irradiation i: effect on germination and general growth characteristics of plants–a review. *Pakistan journal of botany*, *50*(6), 2449-2453.

Mastuti, R. (2017). Dasar-dasar kultur jaringan tumbuhan. Universitas brawijaya press.

Naing, A. H., Park, K. I., Chung, M. Y., Lim, K. B., & Kim, C. K. (2013). Optimization of factors affecting efficient shoot regeneration

in *Chrysanthemum* cv. Shinma. *Plant Cell, Tissue and Organ Culture*, 112(3), 323–330. https://doi.org/10.1007/s40415-015-0143-0

Nuryanto, H. (2011). Budi daya tanaman krisan. Ganeca Exact. Hlm. 1-15.

Pangesti, D., Azizah, E., Saputro, N. W., & Sanjaya, L. (2022). Observasi karakter 6 klon krisan (*Chrysanthemum Morfolium* Ramat.) mutan melalui uji buss (Baru, Unik, Seragam Dan Stabil). *AGRIUM: Jurnal ilmu pertanian*, *25*(2), 149-165. https://doi.org/10.30596/agrium.v25i2.9801.

Pratiwi, D. R., Wening, S., Nazri, E., & Yenni, Y. (2021). Penggunaan alkohol dan sodium hipoklorit sebagai sterilan tunggal untuk sterilisasi eksplan kelapa sawit. *Jurnal penelitian kelapa sawit*, *29*(1), 1-10. https://doi.org/10.22302/iopri.jur.jpks.v29i1.120.

Purnamaningsih, R., & Ashrina, M. (2011). Pengaruh BAP dan NAA terhadap induksi kalus dan kandungan artemisinin dari *Artemisia Annua* L. *Berita Biologi*, *10*(4), 59526.

Riska, N. W. S., Saputra, R. A., & Sofyan, A. (2021). Adaptasi pertumbuhan setek bunga krisan (*Chrysanthemum* sp.) menggunakan naungan di Banjarbaru, Kalimantan Selatan. *Jurnal hortikultura*, *31*(1). https://doi.org/10.21082/jhort.v31n1.2021.p31-40.

Schwarz, O. J., & Beaty, R. M. (2018). Organogenesis in plant tissue culture concepts and laboratory exercises (pp. 125-138). Routledge. https://doi.org/10.1201/9780203743133-14.

Setiawan, R. B., Khumaida, N., & Dinarti, D. (2015). Induksi mutasi kalus embriogenik gandum (*Triticum aestivum* L.) melalui iradiasi sinar gamma untuk toleransi suhu tinggi. *Jurnal agronomi Indonesia (Indonesian journal of agronomy)*, *43*(1), 36-44. https://doi.org/10.24831/jai.v43i1.9589.

Setiawati, T., Arofah, A. N., & Nurzaman, M. (2020). Induksi kalus krisan (*Chrysanthemum morifolium* Ramat var. Tomohon Kuning) dengan 2, 4-*dichlorophenoxyacetic acid* (2, 4-D) dan *6-benzylaminopurine* (BAP) pada kondisi pencahayaan berbeda. *Jurnal pro-life*, *7*(1), 13-26. https://doi.org/10.33541/jpvol6Iss2pp102.

Shafiei, M. R., Hatamzadeh, A., Azadi, P., & Lahiji, H. S. (2019). Mutation induction in *Chrysanthemum* cut flowers using gamma irradiation method. https://doi.org/10.22059/jornamental.2019.665139

Shintiavira, H., Pramanik, D., Daniyanti, R. D., Pertiwi, M. D., & Rachmawati, F. (2024). Effects of explants and culture medium compositions on quality of chrysanthemum 'Jayanti Agrihorti' rooted cuttings. *Ilmu Pertanian (Agricultural Science)*, *9*(2), 68-76. https://doi.org/10.1104/pp.107.100370.

Singh, M., & Bala, M. (2015). Induction of mutation in chrysanthemum (*Dendranthema grandiflorum* Tzvelev.) cultivar Bindiya through gamma irradiation. *Indian Journal of Horticulture*, *72*(3), 376-381.

Sjahril, R., Haring, F., Riadi, M., Rahim, M. D., Khan, R. S., Amir, A., & AR, T. (2016). Performance of NAA, 2iP, BAP and TDZ on callus multiplication, shoots initiation and growth for efficient plant regeneration system in Chrysanthemum (*Chrysanthemum morifolium* Ramat.). *International Journal of Agriculture System*, 52-61.

Smith, R. H. (2013). Plant tissue culture: techniques and experiments. academic press. Hlm. 1-40. https://doi.org/10.1017/S0014479712001433.

Sulistiani, E., S.A. Yani. (2012). Produksi bibit tanaman dengan menggunakan teknik kultur jaringan. Bogor (ID): SEAMEO BIOTROP.

Sumiati, S. (2021). Penggunaan pelarut etanol dan aseton pada prosedur kerja ekstraksi total klorofil daun jati (*Tectona grandis*) dengan metode spektrofotometri. *Indonesian journal of laboratory*, *4*(1), 30-35. https://doi.org/10.22146/ijl.v4i1.65418.

Syafriyudin, S., & Ledhe, N. T. (2015). Analisis pertumbuhan tanaman krisan pada variabel warna cahaya lampu LED. *Jurnal Teknologi*, *8*(1), 83-87. DOI: https://doi.org/10.35799/jurtek.v8i1.1116.

Syaifudin, M. (2023). Biologi radiasi: dasar-dasar dan aplikasi. Hlm. 27-40. https://doi.org/10.55981/brin.563.

Wang, L., Wu, J., Feng, L., & Gao, P. (2020). Morphological, cytological and molecular variations induced by gamma rays in *Chrysanthemum morifolium* 'Donglinruixue'. *Folia Horticulturae*, *32*(1), 87-96.

Wardani, D. K. (2020). Induksi kalus tanaman nilam (*Pogostemon cablin* Benth) dengan pemberian konsentrasi auksin jenis 2, 4-D (Dichlorophenoxyacetic acid) dan pikloram. *Jurnal Indonesia Sosial Sains*, *1*(5), 332231. https://doi.org/10.36418/jiss.vli5.73.

Waseem, K., Khan, M. Q., Jaskani, J., Jilani, M. S., & Khan, M. S. (2009). Effect of different auxins on the regeneration capability of chrysanthemum leaf discs. *Int J Agric Biol*, *11*(4), 468-472.

Weiss, D., & Ori, N. (2007). Mechanisms of cross talk between gibberellin and other hormones. *Plant physiology*, *144*(3), 1240-1246.

Wi, S. G., Chung, B. Y., Kim, J. S., Kim, J. H., Baek, M. H., Lee, J. W., & Kim, Y. S. (2007). Effects of gamma irradiation on morphological changes and biological responses in plants. *Micron*, *38*(6), 553-564.

Widyastuti, N., & Deviyanti, J. (2024). Kultur jaringan–teori dan praktik perbanyakan tanaman secara *In Vitro*. Penerbit Andi. Hlm. 61-70.

Wulandari, S., Nisa, Y. S., Taryono, T., Indarti, S., & Sayekti, R. S. (2022). Sterilisasi peralatan dan media kultur jaringan. *Agrotechnology innovation (Agrinova)*, *4*(2), 16-19. https://doi.org/10.22146/a.77010.

Xue, J. P., Yu, M., & Zhang, A. M. (2003). Studies on callus induced from leaves and plantlets regeneration of the traditional Chinese medicine Chrysanthemum morifolium. *China journal of Chinese materia medica*, *28*(3), 213-216.

Yamaguchi, H., Shimizu, A., Degi, K., & Morishita, T. (2008). Effects of dose and dose rate of gamma ray irradiation on mutation induction and nuclear DNA content in chrysanthemum. *Breeding Science*, *58*(3), 331-335.

Yusnita (2015). Kultur jaringan tanaman sebagai teknik penting bioteknologi Untuk menunjang pembangunan pertanian. Penerbit Aura Publishing, 1–86.

Zadie J (2024). Callus: A foundation for plant growth and biotechnology. J Plant Biochem Physiol. 12:328

Zhang L, Vijg J. (2018). Somatic mutagenesis in mammals and its implications for human disease and aging. Annual review genetic. 52:397-419. DOI: https://doi.org/10.1146/annurev-genet-120417-031501.

Zhang, Y., Wang, C., Ma, H., & Dai, S. (2013). Assessing the genetic diversity of *chrysanthemum* cultivars with microsatellites. *Journal of the american society for horticultural science*, *138*(6), 479-486. https://doi.org/10.21273/JASHS.138.6.479.

Ziraluo, Y. P. B. (2021). Metode perbanyakan tanaman ubi jalar ungu (*Ipomea batatas* poiret) dengan teknik kultur jaringan atau stek planlet. *Jurnal inovasi penelitian*, *2*(3), 1037-1046. https://doi.org/10.47492/jip.v2i3.819.