

## DAFTAR PUSTAKA

- Ahmed, W., Nawaz, M., Saleem, B., & Asim, M. 2005. Incidence of Mango Midge and Its Control in Different. *International Conference of Mango and Date Palm: Culture and Export, June 2005*, 98–102.
- Amouroux, P., Normand, F., Nibouche, S., & Delatte, H. 2013. Invasive Mango Blossom Gall Midge, *Procontarinia mangiferae* (Felt) (Diptera: Cecidomyiidae) in Reunion Island: Ecological plasticity, permanent and structured populations. *Biological Invasions*, 15(8), 1677–1693. <https://doi.org/10.1007/s10530-012-0400-0>
- Asadi-Farfar, M., Karimpour, Y., Lotfalizadeh, H., & Buhl, P. N. 2021. Four New Species and New Records of *Platygastrinae* (Hymenoptera: Platygastridae) from Iran. *European Journal of Taxonomy*, 2021(750), 29–51. <https://doi.org/10.5852/ejt.2021.750.1359>
- Augustyn, W. A., Botha, B. M., Combrinck, S., & Du Plooy, W. (2010). Correlation of Volatile Profiles of Twenty Mango Cultivars with their Susceptibilities to Mango Gall Fly Infestation. *South African Journal of Botany*, 76(4), 710–716. <https://doi.org/10.1016/j.sajb.2010.07.005>
- Augustyn, W. A., Plooy, W., Botha, B. M., & Wilpe, E. Van. (2013). Infestation of *Mangifera Indica* by the Mango Gall Fly, *Procontarinia matteiana*, ( Kieffer & Cecconi ) (Diptera : Cecidomyiidae ). *African Entomology*. 21(1998), 79–88. DOI 10.4001/003.021.0103
- Buhl, P. N. (2015). Further New or Little Known Neotropical Species of *Platygastrinae* (Hymenoptera: Platygastridae). *International Journal of Environmental Studies*, 72 (2), 316–330. DOI 10.1080/00207233.2014.994275
- Dorchin, N. (2008). A Catalog of the Cecidomyiidae (Diptera) of the World. In *Encyclopedia of Entomology*. 5<sup>th</sup> Edition.
- Fajrina Simamora, K., Maryana, N., Hidayat, P., (2022). Morfometri Parasitoid Nyamuk Ganjur Alang-Alang Asal Kabupaten Cianjur, Jawa Barat. *Maret 2022*, 19(1), 62–76.
- Fitri, Z. E., Aprilia, R., Madjid, A., & Imron, A. M. N. (2022). Ensiklopedia Digital Berdasarkan Klasifikasi Varietas Buah Mangga (*Mangifera* spp.) Menggunakan Algoritma Backpropagation. *Komputika: Jurnal Sistem Komputer*, 11(2), 113–120. <https://doi.org/10.34010/komputika.v11i2.5513>
- ..., M. G., Mallapur, C. P., & Archana, K. A. (2020). New Report of Mango Midge (*Procontarinia* Sp.) On Mango In Karnataka. *Journal of Zoology Studies*, 8(5), 184–186.
- ..., H. H. (2018). Inventarisasi Serangga Hama Perusak (*Mangifera* spp.) Di Kabupaten Lombok Utara. *Jurnal Imiah*,



- Jadhav, K. M., Patel, R. K., & Patel, S. A. (2013). Biology Of Gall Fly, *Procontarinia matteiana* (Kieffer & Cecconi) On Mango. *AGRES-An International e-Journal*, 2(3), 358–362. [www.arkgroup.co.in](http://www.arkgroup.co.in)
- Jiao, K., Wang, H. A. O., Wei, D., Mo, J., & Wang, Y. (2018). A New Species of Procontarinia (Diptera: Cecidomyiidae) Damaging Fruit of Mango, *Mangifera indica* (Anacardiaceae), in China. *Zootaxa*. 4413 (2): 368-376. <https://doi.org/10.11646/zootaxa.4413.2.8>
- K. Stone, G. . & S. (2003). The Adaptive Significance of Insect Gall Morphology. *Ecology and Evolution*. 18(10): 512-522. DOI: 10.1016/S0169-5347(03)00247-7
- Luqyana Z. T. M, & Husni, P. (2019). Aktivitas Farmakologi Tanaman Mangga (*Mangifera indica* L.): Review. *Jurnal Farmaka*, 17(2), 187.
- Matsuo, K., Fujii, T., Tokuda, M., Ganaha-Kikumura, T., Yukawa, J., & Yamagishi, K. (2018). Descriptions of Two New Species of *Platygaster latreille* that Attack Gall Midges (Diptera, Cecidomyiidae) with Notes on their Biology (hymenoptera, platygastridae). *Zoo Keys*, 2018 (754), 113–125. <https://doi.org/10.3897/zookeys.754.23296>
- Memon, M. Q., Lanjar, A. G., Lohar, M. K., Rustamani, M. A., Bukero, A., Khushk, G. M., Solangi, A. W., & Khuhro, N. A. (2017). The Biology of Mango Leaf Gall Midge, *Procontarinia Mattiena* Kieffer and Cecconi (Diptera: Cecidomyiidae). *Sci.Int.(Lahore)*,29(1),267–269.
- Nelly, N., Habazar, T., Syahni., dan Buchori, D. (2009). Pengaruh Suhu terhadap Perkembangan Pradewasa Parasitoid *Eriborus argenteopilosus* Cameron (Hymenoptera: Ichneumonidae). *Jurnal Natur Indonesia*. 13(3): 250-255.
- Patange, N.R. (2017). *Natural Enemy Complex Associated With Pigeonpea Pod Fly , Melanagromyza obtusa Malloch ( Agromyzidae : Diptera ) In Marathwada Region Of Maharashtra , India. January 2017, 2–6.*
- Shengfeng, L., Pinru, L., Yuwei, N., Manmiao, Y., and Xiuhua, H. 2018. Invasive Species *Procontarinia robusta* Li, Bu & Zang Gall Development, Structure and Leaf Distribution Preferences of Diptera:Cecidomyiidae. *Formosan Entomologist*. 38:84-91. DOI: 10.6662/TESFE.2018009.
- Rehman, H. M., Mahmood, R., Razaq, M., & Reddy, G. V. P. (2016). Damage Patterns, Monitoring, and Management of *Procontarinia mangiferae* (Diptera: Cecidomyiidae) in Pakistan. *Journal of Economic Entomology*, 109(6), 2446–  
[.org/10.1093/jee/tow189](https://doi.org/10.1093/jee/tow189)
- uhrawy, V. (2008). Gall midges (Diptera: Cecidomyiidae) of  
tated List of Species and Zoogeographical Analysis. *Studia*  
5(1/2), 49–150.



- Susila, I. W., Sumiartha, I. K., Supartha, I. W., Yudha, I. K. W., Utama, I. W. E. K., Yasa, I. W. S., & Wiradana, P. A. (2022). Abundance, Distribution Mapping and DNA Barcoding of *Procontarinia robusta* (Diptera: Cecidomyiidae), a mango gall midge in Bali, Indonesia. *Biodiversitas*, 23(12), 6428–6436.
- Suwardike, P., Rai, I.N., Dwiyani, R., & Kriswiyanti, E. 2018. Kesesuaian Lahan Untuk Tanaman Mangga (*Mangifera indica* L.) Di Buleleng. Universitas Udayana, Bali.
- Syawaluddin, S., Hidayat, P., & Maryana, N. (2019). Serangga yang Berasosiasi dengan Puru Daun Eukalptus di Sumatra Utara. *Jurnal Entomologi Indonesia*, 16(1), 9. <https://doi.org/10.5994/jei.16.1.9>
- Talukdar, B., & Das, B. K. (2017). Diversity of Chalcidoid Parasitoids (Hymenoptera) Associated with Midge Galls (Diptera: Cecidomyiidae) on *Mangifera indica* L. *Insect Diversity and Taxonomy*, January 2017.
- Tooker, J. F., & Giron, D. (2020). The Evolution of Endophagy in Herbivorous Insects. *Frontiers in Plant Science*, vol.11 (November), 1–20.
- Uechi, N., Kawamura, F., Tokuda, M., & Yukawa, J. (2002). A Mango Pest, *Procontarinia mangicola* (Shi) comb. nov. (Diptera: Cecidomyiidae), Recently found in Okinawa, Japan. *Applied Entomology and Zoology*, 37(4), 589–593.
- Ur Rehman, H. M., Mahmood, R., & Razaq, M. (2013). Phenology, Distribution, Biology and Population Trends of *Procontarinia matteiana* Kieffer and Cecconi (Diptera: Cecidomyiidae) in Punjab, Pakistan. *Pakistan Journal of Zoology*, 45(4), 941–947.
- Vasanthakumar, D., Palanisamy, S., & Sharma, R. M. (2020). First Report of Mango Leaf Gall Midge *Procontarinia robusta* Li, Bu & Zhang (Diptera: Cecidomyiidae) from India. *Journal of Threatened Taxa*, 12(13), 16924–16926. <https://doi.org/10.11609/jott.5447.12.13.16924-16926>
- Walalangi, M., Tulung, M., Kaligis, J. B., & Rante, C. S. (2018). Serangan Hama Penggerek Cabang Mangga (*Rytidodera* sp) (Coleoptera: Cerambycidae) di Kelurahan Manembo-Nembo Kota Bitung. *Perhimpunan Entomologi Indonesia*, 6(16), 1–7.
- Wang, Q., He, X. Z., & Wang, Q. (2018). Demographic Dynamics of *Platygaster demades* in Response to Host Density. *BIOLOGICAL CONTROL*, 72 (May 2014), 46–53. <https://doi.org/10.1016/j.biocontrol.2014.02.008>



Hahn, J. D., & Ascerno, M. E. (2015). Insect and Mite Galls. *Journal of Insect Science and Technology*, 1–6.

C., Wu, Y., Fisher, N., Saimanee, T., Sangtongpraow, B., Zhu, H., & Salle, J. La. (2014). Two New Aprostocetus Species (Hymenoptera: Eulophidae: Tetrastichinae), Fortuitous Parasitoids of Invasive Fruit Cuckoo Beetles (Tetrastichinae) on Eucalyptus and Erythrina. *Zootaxa*, 3846, 1–7. <https://doi.org/10.11646/zootaxa.3846.2.6>

Yao Yanxi, Yang Zhongqi, Y. J. (2009). *A New Species of the Genus Systasis Walker, 1834 (Hymenoptera: Pteromalidae) Parasitizing an Important Invasive Alien Insect Pest Obolodiplosis robiniae (Diptera: Cecidomyiidae) from China*. *Sci.Silvae Sinicae*. <https://html.rhhz.net/linyekexue/html/20090815.htm>



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## LAMPIRAN

**Lampiran 1.** Tabel Spesies Parasitoid yang ditemukan di Kecamatan Paleteang

No	Kecamatan	Titik Lokasi	Spesimen	Jumlah
			Parasitoid	Individu
1	Paleteang	Laleng Bata	<i>Systasis dasineuræ</i>	3
			<i>Aprostocetus</i> sp.	10
			<i>Platygaster</i> sp.	13
		Macinnae	<i>Systasis dasineuræ</i>	2
			<i>Aprostocetus</i> sp.	10
			<i>Platygaster</i> sp.	10
2	Watang Sawitto	Maccorowalie	<i>Systasis dasineuræ</i>	11
			<i>Aprostocetus</i> sp.	13
			<i>Platygaster</i> sp.	11
		Penrang	<i>Systasis dasineuræ</i>	7
			<i>Aprostocetus</i> sp.	16
			<i>Platygaster</i> sp.	20

**Lampiran 2.** Hasil Identifikasi *Procontarinia robusta*



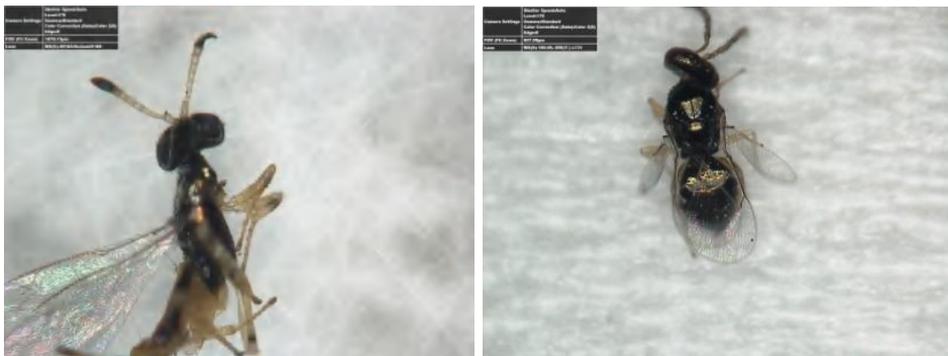
Gambar 1. *Procontarinia robusta* dibawah mikroskop



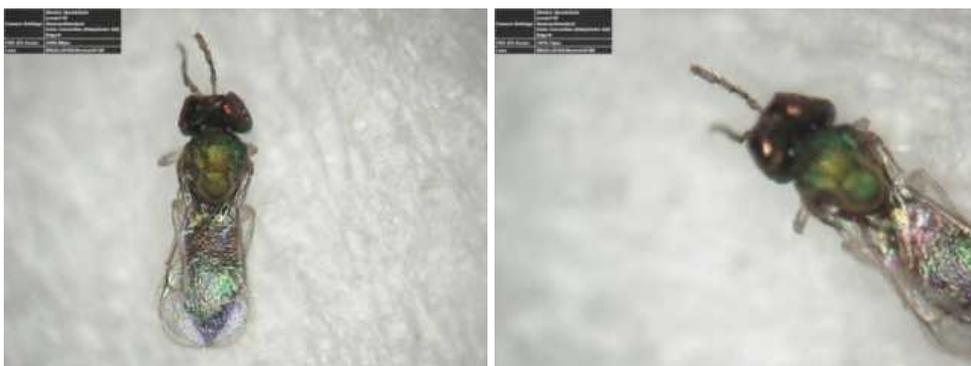
Lampiran 3. Hasil Identifikasi Parasitoid Puru Daun Mangga



Gambar 2. *Systasis dasineura*



Gambar 3. *Aprostocetus* sp.



Gambar 4. *Platygaster* sp.



### Lampiran 4. Dokumentasi di Lapangan Gambar Lampiran 1. Kondisi Lokasi Penelitian



Gambar 1. Lahan Tanaman Mangga



Gambar 2. Daun Mangga di Kec. Paletang



Gambar 2. Daun Mangga di Kec. Maccorowalie

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**Gambar Lampiran 2. Pengamatan Gejala Puru Daun Manga**

Gambar 4. Pengecekan daun yang akan dijadikan sampel



Gambar 5. Gejala serangan pada daun muda dan daun tua





Gambar 6. Pengambilan sampel daun bergejala puru

#### Lampiran 5. Dokumantasi di Laboratorium

#### Gambar Lampiran 4. Pemeliharaan Sampel Puru Daun Mangga



Gambar 7. Pemeliharaan serangga di laboratorium





Gambar 8. Proses identifikasi hama dan parasitoid menggunakan mikroskop

