ABSTRAK

PENGARUH FREKUENSI DAN JUMLAH APLIKASI *FLOWER INDUCER* TERHADAP PEMBUNGAAN ANGGREK *Dendrobium* INDONESIA RAYA

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Pembungaan anggrek *Dendrobium* dipengaruhi oleh beberapa faktor seperti intensitas cahaya matahari, suhu, status nutrisi, dan perubahan hormon. Disamping itu, anggrek *Dendrobium* memiliki masa juvenil panjang yang dapat menghambat pembentukan malai bunga. Penilitian ini bertujuan untuk mempelajari pengaruh frekuensi dan jumlah aplikasi *Flower Inducer* terhadap pembungaan anggrek *Dendrobium* Indonesia Raya belum berbunga dan frekuensi dan jumlah aplikasi *Flower Inducer* terbaik untuk pembungaan tanaman anggrek *Dendrobium* Indoneisa Raya dewasa yang belum berbunga. Penelitian ini dilaksanakan di Kebun Hayyin Anggrek, Pringsewu Selatan, Pringsewu, Lampung, yang direncanakan 3 bulan, mulai bulan Agustus sampai Oktober 2023. Penelitian ini dilaksanakan menggunakan rancangan acak lengkap (RAL) dengan empat ulangan, perlakuan disusun secara faktor tunggal. Perlakuan meliputi kontrol (P0), Aplikasi *Flower Inducer* satu kali seminggu selama 4 minggu (P1), Aplikasi *Flower Inducer* satu kali seminggu selama 6 minggu (P2), Aplikasi *Flower Inducer* dua kali seminggu selama 2 minggu (P3), dan Aplikasi *Flower Inducer* dua kali seminggu selama 3 minggu. Variabel pengamatan meliputi persentase bunga, jumlah malai bunga pertanaman, panjang malai bunga, jumlah kuntum bunga pertanaman, dan jumlah tunas. Analisis data dilakukan dengan sidik ragam dan dilanjutkan dengan uji beda nyata terkecil (BNT) pada taraf 5%. Sedangkan *standard error of the mean* digunakan pada variabel yang tidak dapat dianalaisis ragam. Hasil dari penilitian menunjukkan bahwa tanaman yang diberi perlakuan *Flower Inducer* menunjukkan persentase tanaman berbunga hingga 75%-83,3%, dibandingkan dengan kontrol yang hanya menunjukkan hasil 16,7%. Semua tanaman anggrek *Dendrobium* Inaraya yang diberi perlakuan *Flower Inducer* mampu menginduk pembungaan pada minggu ke-3 setelah aplikasi dengan persentase sebesar 8,3% hingga 41,7%. Sedangkan untuk tanaman yang tidak diaplikasikan *Flower Inducer* mampu menghasilkan persentase berbunga mencapai 8,3% pada minggu ke-6 setelah aplikasi. Pada akhir pengamatan (9 minggu setelah pemberian *Flower Inducer*), rata-rata jumlah malai pertanaman mencapai 0,5-1,6 malai pertanaman dengan rata-rata panjang malai pertanaman 17,7 cm- 26,1 cm. Rata-rata jumlah kuntum pertanaman yaitu 5,2-9,2 kuntum pertanaman. Rata-rata jumlah tunas baru muncul yaitu 08-1,8 tunas baru.

Kata kunci: *Dendrobium, Flower Inducer*, Pembungaan, Sitokinin

ABSTRACT

EFFECT OF FREQUENCY AND NUMBER OF FLOWER INDUCER APPLICATIONS ON FLOWERING OF *Dendrobium* ORCHIDS IN GREATER INDONESIA

by

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The flowering of Dendrobium orchids is influenced by several factors such as sunlight intensity, temperature, nutritional status, and hormonal changes. In addition, Dendrobium orchids have a long juvenile period that can inhibit the formation of flower panicles. This study aims to study the effect of the frequency and number of Flower Inducer applications on the flowering of unflowering Dendrobium Indonesia Raya orchids and the frequency and number of the best Flower Inducer applications for the flowering of adult Dendrobium Raya Raya orchid plants that have not yet flowered. This research was carried out at the Hayyin Orchid Garden, South Pringsewu, Pringsewu, Lampung, which is planned for 3 months, from August to October 2023. This study was carried out using a complete randomized design (RAL) with four replicas, the treatment was arranged in a single factor manner. Treatments included control (P0), Flower Inducer application once a week for 4 weeks (P1), Flower Inducer application once a week for 6 weeks (P2), Flower Inducer application twice a week for 2 weeks (P3), and Flower Inducer application twice a week for 3 weeks. Observation variables included the percentage of flowers, the number of plant flower panicles, the length of flower panicles, the number of plant flower florets, and the number of buds. Data analysis was carried out with multiple fingerprints and followed by the smallest real difference test (BNT) at the level of 5%. Meanwhile, the standard error of the mean is used on variables that cannot be analyzed variously. The results of the study showed that plants treated with Flower Inducer showed a percentage of flowering plants of up to 75%-83.3%, compared to controls that only showed a yield of 16.7%. All Dendrobium Indonesia Raya orchid plants that were treated with Flower Inducer were able to host flowering in the 3rd week after application with a percentage of 8.3% to 41.7%. As for plants that are not applied, the Flower Inducer is able to produce a flowering percentage of 8.3% in the 6th week after application. At the end of observation (9 weeks after the administration of the Flower Inducer), the average number of planting panicles reached 0.5-1.6 planting panicles with an average planting panicle length of 17.7 cm- 26.1 cm. The average number of planting florets is 5.2-9.2 plant florets. The average number of new shoots appears is 08-1.8 new shoots.

Keywords: *Cytokinin, Dendrobium, Flower Inducer, Flowering*