

ABSTRAK

PENGARUH KOMBINASI LAMA PERENDAMAN KNO_3 DAN AIR KELAPA TERHADAP DORMANSI BENIH KEMIRI SUNAN (*Reutealis trisperma* (Blanco) Airy Shaw)

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Kemiri Sunan (*Reutealis trisperma* (Blanco) Airy Shaw) merupakan tanaman penghasil minyak nabati yang berpotensi sebagai bahan baku biodiesel dan oleokimia seperti sabun. Pengembangannya masih terkendala dormansi benih akibat kulit biji yang keras dan impermeabel, sehingga perkecambahan alami baru terjadi setelah 4–5 bulan. Penelitian ini bertujuan untuk mengetahui pengaruh kombinasi lama perendaman KNO_3 dan air kelapa, serta mengetahui perlakuan terbaik terhadap pematangan dormansi benih Kemiri Sunan. Percobaan dilaksanakan pada Maret–Mei 2026 di Kelurahan Mugarsari, Kecamatan Tamansari menggunakan Rancangan Acak Kelompok (RAK) dengan 10 perlakuan dan 3 ulangan. Perlakuan terdiri atas kombinasi lama perendaman KNO_3 0,6% (30; 60; dan 90 menit) dengan kombinasi lama perendaman air kelapa (2; 4; dan 6 jam). Parameter yang diamati meliputi daya kecambah, kecepatan tumbuh, potensi tumbuh maksimum, keserempakan tumbuh, intensitas dormansi, serta bobot basah dan bobot kering tanaman. Hasil penelitian menunjukkan bahwa perendaman KNO_3 dan air kelapa berpengaruh terhadap daya kecambah, kecepatan tumbuh, potensi tumbuh maksimum, keserempakan tumbuh, serta intensitas dormansi tetapi tidak berpengaruh terhadap bobot basah dan bobot kering tanaman. Kombinasi lama perendaman KNO_3 0,6% selama 90 menit dan air kelapa selama 6 jam merupakan kombinasi perlakuan yang berpengaruh baik terhadap dormansi benih Kemiri Sunan.

Kata kunci: air kelapa, dormansi, kemiri sunan, KNO_3 , perkecambahan

ABSTRACT

EFFECT OF LONG COMBINATION OF KNO₃ SOAKING AND COCONUT WATER ON THE DORMANCY OF SUNAN CUNDLENUT SEEDS (*Reutealis trisperma* (Blanco) Airy Shaw)

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Sunan candlenut (*Reutealis trisperma* (Blanco) Airy Shaw) is a vegetable oil-producing plant that has the potential to be a raw material for biodiesel and oleochemicals like soap. Its development is still constrained by seed dormancy due to the hard and impermeable seed shell, so natural germination only occurs after 4-5 months. This study aims to determine the effect of the combination of long soaking of KNO₃ and coconut water, as well as to find out the best treatment for the breakage of dormancy of Sunan candlenut seeds. The trial was carried out in March-May 2026 in Mugarsari Village, Tamansari District using a Group Random Design (RAK) with 10 treatments and 3 replications. The treatment consisted of a combination of 0.6% KNO₃ immersion (30; 60; and 90 minutes) with a combination of coconut water immersion (2; 4; and 6 hours). The parameters observed included germination power, growth speed, maximum growing potential, growing smoothness, dormancy intensity, and wet weight and dry weight of the plant. The results showed that the soaking of KNO₃ and coconut water had an effect on germination power, growth speed, maximum growth potential, growth coherence, and dormancy intensity but had no effect on the wet weight and dry weight of the plant. The combination of 0.6% KNO₃ soaking for 90 minutes and coconut water for 6 hours is a combination of treatments that have a good effect on the dormancy of Sunan candlenut seeds.

Keywords: coconut water, dormancy, germination. KNO₃, sunan candlenut