



Pertumbuhan Bibit Nangka (*Artocarpus heterophyllus*) Berdasarkan Variasi Waktu Panen Buah

Oleh:

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Abstrak

Produksi buah nangka khususnya di Jawa tidak menentu pada setiap bulannya, sehingga perlu dilakukan penelitian mengenai variasi produktivitas dan kualitas benih nangka yang dihasilkan setiap bulan dalam satu tahun. Tujuan khusus penelitian ini adalah untuk mengetahui (1) Perkecambahan biji dan keberhasilan tumbuh bibit nangka; dan (2) kelimpahan produksi buah dan pengaruhnya terhadap daya berkecambah dan tumbuh semai. Penelitian ini diharapkan akan membantu dalam pemilihan tanaman nangka yang adaptif, berkualitas, serta mampu berbunga dan menghasilkan buah di luar musim berbuah nangka pada umumnya di DIY, agar dapat diperoleh induk-induk nangka yang sepanjang tahun dapat memproduksi buah.

Pengambilan sampel buah nangka dilakukan setiap bulan, mulai bulan Januari hingga Desember 2018, pada 3 blok pertanaman kombinasi uji keturunan dan uji provenans nangka di Petak 58 RPH Candi, BDH Karangmojo, BKPH Gunung Kidul. Uji keturunan nangka di Karangmojo terdiri dari 11 provinsi sebagai sumber benih dari 390 famili. Evaluasi pertumbuhan pohon dan produksi buah selama 1 tahun telah dilakukan pada pertanaman uji tersebut. Biji dibedakan berdasarkan (1) letak biji pada bagian buah, yaitu bagian ujung, tengah, dan pangkal buah; (2) ukuran biji, yaitu besar ($> 3,5$ cm) dan kecil (diameter 2-3,5 cm); (3) ukuran buah, yaitu buah besar, sedang dan kecil; (4) sampel buah dari Karangmojo dan luar Karangmojo; dan (5) nomor seedlot (provenans). Pengambilan data yang dilakukan adalah penghitungan jumlah biji, jumlah biji terseleksi, persen perkecambahan, persen jadi semai dan persen jadi bibit pada berbagai sumber variasi.

Perkecambahan biji dan keberhasilan tumbuh bibit nangka paling baik diperoleh dari biji yang diunduh pada bulan Agustus, provenan Pekanbaru, Seedlot 267, ukuran buah besar, biji besar, dan letak biji pada bagian tengah buah. Kelimpahan berbuah meningkatkan persen kecambah, persen jadi semai, dan persen jadi bibit.

Kata kunci: nangka; uji provenans; waktu panen; persen kecambah; persen jadi bibit

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***The Growth of Jackfruit (*Artocarpus heterophyllus*) Seedlings
Based on Different Fruit Harvest Time***

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Abstract

The production of jackfruit fruit, especially in Java, is uncertain every month, therefore research on the variation on productivity and quality of jackfruit seeds produced every month in one year is required. The specific objectives of this research were to determine (1) seed germination and seedling survival; and (2) an abundance of fruit production and its effect on seed germination and seedling growth. It is expected that this study will contribute to the selection of the mother trees that are adaptive, superior, and capable of flowering and producing fruits off-season in Yogyakarta, so that the trees can bear flowers and fruits throughout the year.

Fruit samples were taken every month. From January to December 2018, in three blocks of the combination tests of progeny and provenance in Compartment 58, RPH Candi, BDH Karangmojo, BKPH Gunungkidul. The progeny consists of 390 families collected from 11 provinces by which as seed sources. Evaluation of tree growth and fruit production for one year was conducted in the site. Seeds were distinguished based on (1) the position of seeds in the fruit (tip, middle, base); (2) seed size, (large, $\text{Ø} > 3.5$ cm); (small, $\text{Ø} = 2-3.5$ cm); (3) fruit size (large, medium, small); (4) fruit sample source (Karangmojo and outside Karangmojo); and (5) number of seedlot (provenances). Data were collected on the number of seeds, number of selected seeds, seed germination percentage, percentage of germinated seed survival before transplanting into polybag and seedling survival percentage.

The best of seed germination and seedling survival were performed by seeds collected in August, from Pekanbaru provenance, Seedlot 267. Large fruits and large seeds taken from the middle part of fruits showed best as well. The results indicates that during an abundance of fruit season will correlate to the increases of the percentages of seed germination, germinated seed survival before transplanting into polybag and seedlings survival.

Keywords: jackfruit, provenance test, harvest time, seed germination, survival rate.

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