KAJIAN PRODUKSI BUAH, BIJI DAN BENIH TUSAM
(Studi Kasus di Kebun Benih Sempolan, Jember)

Oleh :
Soraya Ari Rochmaniati Anom Sari *
90/76549/02912/KT

INTISARI

Untuk mengetahui variasi produksi buah, biji dan benih, efisiensi biji dan benih serta viabilitas benih pada Tusam, berdasarkan posisi dalam tajuk, telah dilakukan pengunduhan buah terhadap 40 batang pohon induk di Kebun Benih PPGM-P3-78 Sempolan, Jember pada Bulan Maret s/d Juli 1995. Buah-buah tersebut kemudian diekstraksi dan dihitung jumlah sisik (fertil dan steril) dan bijinya baik yang kosong maupun yang berisi. Efisiensi biji dan benih dianalisis berdasarkan metode Bramlett (1976). Uji Tetrazolium dipergunakan untuk mengetahui viabilitas benih-benih yang diperoleh.

Hasil penelitian menunjukkan bahwa :

1. Produksi buah berbeda nyata untuk tiap posisi tajuk dan bulan pengunduhan, dengan produksi terbaik pada tajuk atas-bulan Juli, tengah-Juli dan atas-Juni. Produksi biji per kon tidak berbeda nyata baik untuk tiap posisi maupun bulan pengunduhan, produksi biji per kon terbaik pada tajuk atas-bulan Juli, bawah-April dan atas-Juni. Produksi benih per kon berbeda nyata untuk tiap posisi dalam tajuk namun tidak berbeda nyata antar bulan pengunduhan. Produksi benih per kon terbaik pada tajuk atas-bulan Juli, atas-April dan atas-Juni.
2. Effisiensi biji tidak berbeda nyata baik untuk tiap posisi tajuk dan bulan pengunduhan. Effisiensi biji terbaik diperoleh pada buah yang berasal dari tajuk bawah-bulan April, bawah-Mei dan atas-Juni. Effisiensi benih berbeda nyata untuk tiap posisi tajuk dan bulan pengunduhan. Effisiensi benih terbaik diperoleh pada tajuk atas-bulan Juli, atas-April dan atas-Juni.
3. Viabilitas benih berbeda nyata untuk tiap posisi dalam tajuk dan bulan pengunduhan. Viabilitas benih terbaik berasal dari tajuk tengah-bulan Juli, atas-Juli dan atas-Juni.
4. Pengunduhan buah pada tajuk bawah tidak dianjurkan karena viabilitas benihnya sangat rendah (antara 20-56 %)

* Mahasiswi Fak. Kehutanan UGM

RESEARCH ON CONES, DEVELOPED SEED AND FILLED SEED PRODUCTION OF *Pinus Merkusii* (Study Case at Sempolan Seed Orchads, Jember)

By :
Soraya Ari Rochmaniati Anom Sari*
90/76549/KT/02912

ABSTRACT

To know variation on cones, developed and filled seed production, developed and filled seed efficiency and also seed viability on Pinus merkussii based on crown position, have been collected cones from 40 mother tree in seed orchads plantation number PPGM-P3-78 Sempolan Jember on March until July 1995. And then the cones were extracted and counted above number of scale (fertil and steril) and number of seed, either filled seed or empty seed. Developed and filled seed efficiency were analyzed by Bramlett's method (1976). Tetrazolium test was used to know above seed viability that have been collected.

The results from this research showed that :

1. *Cones production significant either among crown position or among month collection, with thr best result was gained on upper crown-July, middle crown-July and then upper crown-June. Number of developed seed each cone nonsignificant either among crown position or among month collection, and the best result was gained on upper crown-July, lower crown-April and then upper crown-June. Number of filled seed each cone significant among crown position but non significant among month collection, with the best result was gained on upper crown-July, upper crown-Appril and upper crown-June.*
2. *Developed seed efficiency non significant either among crown position or among month collection, with the best result was gained on lower crown-Appril, lower crown-May and then upper crown-July. Filled seed efficiency significant either among crown position or among month collection with the best result was gained on upper crown-July, upper crown Appril and upper crown-June.*
3. *Seed viability significant among crown position and month collection. The best result of seed viability was gained on middle crown-July, upper crown-July and then Upper crown-June.*
4. *The cones from lower crown wasn't suggested to collect, because the seed viability is very low (about 20-56%)*

---

* Student of forestry faculty, Gadjah Mada University