

Haruetai Chomngam 2007: Flowering Pattern, Seed Development and Effect of Harvesting Time on Seed Yield and Seed Quality of Creat (*Andrographis paniculata* Wall. ex. Nees). Master of Science (Agriculture), Major Field: Horticulture, Department of Horticulture. Thesis Advisor: Assistant Professor Surapong Dumrongkittikule, Dr.Agr. 111 pages.

Flowering pattern, seed development and effect of harvesting time on seed yield and seed quality of creat cv. "Pak Chong 1" were conducted from plants which seeds were sowed seeds in August. The results showed that the first flower bud of creat occurred at 52 days after transplanting (DAT). The creat had the first flowering at 80 DAT and the flowering finished at 138 DAT and used 28 days for flower development from flower bud through flowering. The duration of flowering was 59 days and the total flower number per plant was 2,059. The highest number of flowering occurred at 122 DAT with 120 flowers per day. The flowering order on the main stem could be divided into 4 groups by flowering time; 1) node no. 9-11 (80-81 DAT), 2) node no. 2-8 and 12-15 (94-103 DAT), 3) node no. 16-19 (111-115 DAT) and 4) node no. 20-23 (118-125 DAT), respectively. The shattering of mature pod occurred 33 days after flowering (DAF). The physiological maturity (PM) of seed was 27 DAF. At the PM, the maximum dry weight of seed was 1.333 gram per 1,000 seeds and the seed moisture content was 18.91%. The germination percentage of seed at PM stage was 7%. After storage of those seeds at 5°C for 6 months, the germination percentage was 94%. The creat seeds were harvested every 2 days from 30 days after the first flowering of plant (DAFFP) to 80 DAFFP for seed yield and seed quality testing. The results showed that the seed harvesting at 42 DAFFP gave the highest number of mature seed (34.944 kg. per rai). The 42 DAFFP harvested seeds also gave the highest germination percentage (94.5%) after storage of those seeds for 6 month.

---

Student's signature

---

Thesis Advisor's signature