

Kamolrat Sooksathan 2008: Effect of Delay Harvesting and Flower head Position on Seed quality of Safflower (*Carthamus tinctorius* L.) cv. Panthong. Master of Science (Agriculture), Major Field: Agronomy, Department of Agronomy. Thesis Advisor: Associate Professor Sununta Juntakool, Ph.D. 100 pages.

Seed quality of safflower cv. Panthong as affected by seed maturation , delay harvesting and flower head position were studied at National Corn and Sorghum Research Center, Nakhon Ratchasima province by sowing seed in August 2006 to study seed development. Days to first flowering of safflower were obtained at 69 days after sowing. Peak flowering was obtained at 86 days after sowing (4 flowers/plant/day). Seeds reached their physiological maturity at 30 days after anthesis with 67.5% germination. The highest germination percentages (82.5%) were obtained at 20 days after anthesis.

In order to find out the effect of delay harvesting and flower head position on seed yield and quality, seeds of safflower were sown again in November, 2006. The experiment was arranged in Factorial arrangement in randomized complete block design. The two factors were harvesting time (20, 30, 40 and 50 days after last flowering) and flower head position (main stem, primary branches 1-8 and secondary branches 1-8). The results revealed that seed harvested at 20 days after last flowering showed highest seed yield and quality. Seed yield and quality was tended to decrease at the lower flower head position. High seed yield and quality were obtained from secondary branches average 2.51 g/plant.

Student's signature

Thesis Advisor's signature

____ / ____ / ____