# Divergent Selection of Early Growth Vigor on Safflower Seed Yield. (C01-yau043401-Poster)

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#### **Abstract:**

Many breeders have suggested early vigor (EV) as a desirable selection trait for yield improvement, but little or no work has been done to evaluate its usefulness in safflower (Carthamus tinctorius L.). The objectives of this study were to measure the variation of EV in safflower and the effect of its divergent selection on yield. Six hundred seeds of the Syrian Hama local landrace were sowed in the field at AREC (33.56 N, 36.5 E, 995 masl). Plants with contrasting EV (32 high and 32 low) were selected and bagged to produce self-pollinated seeds for a yield trial in the following season. Variation in EV was moderate to high. EV also had a moderate to high correlation with seed yield. However, divergent EV selection was not effective on changing seed yield due to low heritability of EV. Path analysis showed that the most important yield contributing character in safflower was the number of seeds per plant, but head number per plant gave the highest indirect effect on seed yield.

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### **Presentation Information:**

Presentation Date: Monday, November 11, 2002

Presentation Time: 4:00-6:00 pm

Poster Board Number: 1208

## **Keywords:**

Carthamus tinctorius, heritability, path coefficient analysis, correlations