EFFECT OF SOWING DATES ON SEED FILLING IN DIFFERENT SOYBEAN CULTIVARS

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ABSTRACT

Nine soybean cultivars representing most of known maturity groups were cultivated at four planting dates, i.e. 1st, 15th May, 1st and 15th June at the Experimental Station of National Research Center at Shalakhan Kalubia Governorate to study seed filling in certain soybean cultivars. The results indicated that soybean cultivars significantly differed in seed filling rate (g/day) and effective filling period (days). Moreover, Maximum filling rate was achieved at 54-61 and 68-75 days from sowing, at mid June, at 82-89 days after sowing time at first June and at 96-103 and 110-117 days from sowing resulted from sowing soybean in 15th May and 1st May date, respectively. Meanwhile, sowing date in 15th May gave the maximum effective filling period.

INTRODUCTION

Differences in seed weight are due to differences in rate or duration of dry matter accumulation in the seed in soybean (Evans et al., 1975). Moreover, yield limiting factors differ between cultivars but translocation of photosynthetic products was important. Delayed planting reduced the rate of seed-fill in Corsoy 79 by 4% and Williams 79 by 31%. Corsoy 79 showed a greater rate seed-fill in both May and June plantings in 1983