

THE DEGREE OF BRANCHING IN SAFFLOWER (CARTHAMUS TINCTORIUS L.) A FEW LINES UNDER THE INFLUENCE OF SOWING

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Abstract: *In this paper, the main objective was to determine the influence of sowing time on the degree of branching to a few new lines of safflower obtained from the local population of Timisoara. An important role for the quality and number of branches plant safflower obtained vegetation had three macronutrients (N, P, K). Safflower was grown for its flowers, used for coloring and flavoring. Safflower name derives from the fact that it was cultivated as a cheaper alternative to saffron. This content carthamină because flowers, like saffron. Safflower flowers have calming properties cough. Pigments from safflower flowers are of particular importance for not leave toxic residues colored products. Pigments are synthesized in the root where the vegetation migrates through the conductive tissues in petals. Carthamina is one of the most valuable non-toxic compounds used in the food or in the textile industry. The seeds are used in the treatment of tumors, especially for the localized in the liver. Flowers are considered as having laxative properties, sedative, and is used to treat scarlet fever. It notes that safflower oil is widely used in pharmaceutical industry and antirheumatic detention purgative effect, not oil in the diet increases the amount of cholesterol in the blood. The oil is used as a cure for pain Chinese reumatismale. Medicina recommended seeds in treatment of dysmenorrhea in women, they having an astringent to the uterus. Besides fatty acid content of 32-40%, the seeds contain protein percentage 11-17% and 4-7% water. To highlight the degree of branching capacity new lines of safflower (Carthamus tinctorius L.) under study, organized experience bifactorial the experimental factors were: Factor A - sowing period - Age I - MARCH era II a - APRIL, factor B - safflower lines, T 9, T 10, T 33, T 40 low waist. Placing field experience was made by the method of randomized blocks with plots. The experimental variants were placed in three repetitions with randomization factor B (safflower lines). Researches have shown the influence of planting dates on some elements of productivity achieved by testing new lines of safflower.*

Key words: safflower, lines, sowing, branching.

INTRODUCTION

Safflower (*Carthamus tinctorius* L.) is important as oil plant in Asia, North and Central America and in dry areas with poor soils. Due to its rich fruit oil: 30-35% was introduced in our country in human nutrition, dietetics and food but reducing the amount of cholesterol in the blood. The fruits and flowers are also used in medicine since they have hydrogogue purging and anticough properties. Due to the content of pigments in the petals (20% yellow pigments and 0.5% red pigments), they can be used to produce natural colouring agents for the food, textile, pharmaceutical, and cosmetics industry.

MATERIALS AND METHODS

Experimental field was located on a wet soil type mold bill (Gleize weak), weak decarbonated on lösoide deposits.

Experience has been placed in the field after two factors method in which experimental factors were:

Factor A – sowing time

- 1st time **MARCH**

- 2nd time **MAY**

Factor B – safflower lines

- T 9, T 10, T 33, T 40 short.

Settlement field experience was the method blocks with plots randomized. Experimental variants were placed in three repetitions with randomisation factor B (safflower lines). Production results were calculated and interpreted by analysis of variance method and the biometric features were calculated and interpreted by the method of variation of the string. Except when sowing which was established in factor experienced safflower technology applied to culture was the high culture specific. Plant prior to culture was safflower winter wheat. Fertilization culture was made using complex fertilizers such N15P15K15 the amount of 450 kg / ha complex which meant 70 kg / ha to of each N, P and K. Basic plowing to 20-22 cm depth was performed.

RESULTS AND DISCUSSION

Biometric characters of safflower plants from different lines and analyzed variants differ depending on the time of sowing. Figure 1 presents the variation of the main branches in the era safflower I.

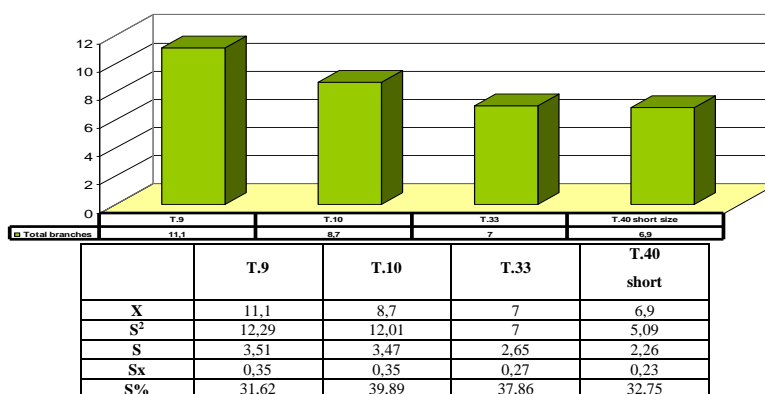


Figure 1. Variation of main branches according safflower lines analyzed

Figure 1 presents the results of measurements on the variation of the number of total branches in safflower plants in the first period (March). They ranged between 11.1 and 11.3. T.33 line highlighted with the best results while 11.3 T.9 line was worth only 11.6. The lowest value was recorded in T40 line short.

Figure 2 shows the results obtained total ramifications safflower plants in era II study (April).

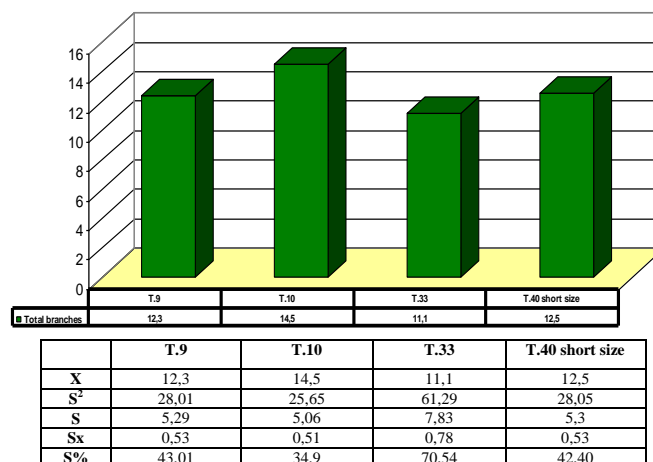


Figure 2. Variation of main branches according safflower lines analyzed

Figure 2. Presents major ramifications safflower plants. The results of measurements made on plants of safflower on the number of total branches are located between 11.1 and 14.5. These values are shown by lines T33 and T10 low waist lines.

CONCLUSIONS

Biometric characters of safflower plants from different lines and analyzed variants differ depending on the time of sowing. Timisoara conditions are favorable for growing safflower. Seeding without significant differences in total ramifications from safflower ultimately affecting the production of achene.

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