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شبكة المعلومات الحامعية

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شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





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جامعة عين شمس

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قسو

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شبكة المعلومات الحامعية



بالرسالة صفحات لم ترد بالأصل



EFFECT OF PLANT DENSITY ON PRODUCTIVITY OF SOME SUNFLOWER VARIETIES

By

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B. Sc. (Agron.), Ain Shams Univ., 1980 M.Sc. (Agron.), Ain Shams Univ., 1989

A thesis submitted in partial fulfillment of the requirements for the degree of

doctor of philosophy

in

Agricultural Science (Agronomy)

Department of Agronomy Faculty of Agriculture Ain Shams University

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APPROVAL SHEET

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ABSTRACT

Mahmoud Gaber Mahmoud El - Baz .Effect of Plant Density on Productivity of Some Sunflower Varieties. Unpublished Doctor of Philosophy Dissertation, Ain Shams University Cairo Egypt. 1995.

The present investigation was carried out at Sakha Agriculture Research Station, Agriculture Research Center, Egypt, during 1991 and 1992 seasons.

The aim of these experiments was to study the effect of varieties (Mayak, Florida 2000 and Sigco 475), hill distances (20, 30 and 40 cm.) and ridge widths (50, 60 and 70 cm.) on growth, yield and yield components and seed chemical composition for sunflower plants.

The obtained results showed that Mayak surpassed the other varieties in green leaf area / plant, LAI, number of green leaves / plant, dry weight of green leaves / plant, stem diameter, internode length, plant height, dry weight / plant, LAR, SLA at most growth periods and in head and stem diameter, number of seeds / head, 100 - seed weight, seed yield per both plant and feddan, oil, protein and carbohydrate yield per feddan at harvest.

Narrow spacing between hills significantly increased the LAI, internode length, plant height and LAR at most growth periods and the oil, protein, carbohydrate and seed yield / fed. at harvest.

Narrow ridge widths significantly increased the leaf area / plant, LAI, LAR, SLA at most growth periods and the oil, protein, carbohydrate and seed yield / fed.

The highest oil % obtained by sowing Sigco 475 at 40 cm apart hills under 60 cm ridge widths and the highest oil yield / fed. recorded by sowing Mayak at 20 cm apart hills under 50 cm. ridge widths. The highest seed yield / fed. recorded by sowing the same variety at 50 cm. ridge width.

Key words: Sunflower, varieties, Hill distance, Ridge width, Plant density.

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