## Effect Of Planting Dates And The Distance Between Plants In The Growth Characteristics And Yield And The Active Material Of The Roselle Plant (Hibiscus Sabdariffa .L )

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## **ABSTRACT**

This study was conducted at two locations firstin the Research Station Field Crops, Faculty of Agriculture / University of Tikrit, and the second location in one of the private farms in the district of Baquba, the Murad area (2010-2011) season included the experiment two factors, one planting dates (April 1 and April 15 and May 1 and 15 May), and the second factor was plants distances of (30, 40, 50 and 60 cm) between plants, and that the distance between the lines (75 cm), designed the experiment study the effect of the dates and distances of agriculture in growth traits and winning and the active ingredient of the plant Roselle. Applied experience using the block design randomized complete (Randomiled Complete Block Design) within the system of factorial experiments with three replicates, and the study included two traits Field, and two traits for the holder and its components and the six attributes of quality, and results showed the following: It was the planting dates Significant effect in the studied traits all. "The superiority first date April 1 for the death and April 15, the site of Tikrit, in giving the highest averages of the recipes in a row and was the increase of the plant (163.64 and 113.23 cm) and the number of branches of the main (27.18 and 22.23) branch / plant and holds securities

goblet dry (39.67 and 36.33) g / plant and holds Seeds (934.37 and 867.08) kg. h.1. also had planting dates significant impact on the active substances it gave the site of Baquba, a private first date-highest rate of vehicles (Sabdaretine and Anthocyanins and DeL-3-glucose) was (144.76 and 316.82 and 221.35) mg / ml, while giving the date the third penalty-highest rate of vehicles (gossypetine and hibiscetine) was (606.75 and 325.93) mg / ml also gave Second date of Baquba, the highest rate of the compound (vit c) was (50.79 mg / ml) while gave the second date for Tikrit highest rate of vehicles (sabdaretine and

anthocyanins and DeL-3-glucose) was (176.78 and 265.58 and 208.84) mg / ml while the record date the third site of Tikrit, the highest rate of vehicles (gossypetine and hibiscetine) was (505.32 and 232.82) mg / ml, while giving first date of Tikrit, the highest rate for the composite) vit c) total (90.79mg/ml) .. As shown distances Agriculture significant differences, recorded the distance (60 cm) between plants Significant effect to my site Baquba, Tikrit to the attributes of the number of branches of the main (24.75 and 22.55) branch / plant and holds Securities goblet dry (52.76 and 49.96) g / plant. and the average distance (30 cm) between plants of the two significant differences to the attributes of the increase of the plant (152.10 and 112.83 cm) and holds seeds (1094.45 and 972.95) kg. e -1, as was the distances agriculture a significant impact on active substances, where given the distance the fourth for the death the highest rate of vehicles (abdaretine and hibiscetine and anthocyanins and DeL-3-glucose)

was (192.62 and 134.63 and 305.22 and 221.2) mg / ml, while they recorded the distance the first site of Baquba, the highest rate for the composite(gossypetine) hit (388.65mg/ml) also gave the distance for the third -highest rate of death composite was vit c (51.41mg/ml) while the fourth gave the distance to the site of Tikrit, the highest rate of vehicles (sabdaretine and hibiscetine and DeL -3-glucose) was (218.23 and 200.44 and 144.48) mg / ml, while they recorded the distance the third site of Tikrit, the highest rate of the compounds (anthocyanins and vit c) of (212.74 and 67.46) mg / ml also recorded the distance the second site of Tikrit, the highest rate for the composite) gossypetine) amounted to (262.16 mg / ml).