

THE EFFECTS OF DIFFERENT SEED RATES OF SELECTED CORIANDER (*Coriandrum sativum* L.) LINES ON YIELD, YIELD COMPONENTS AND ESSENTIAL OIL RATE

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ABSTRACT

This field study was conducted to determine the effects of different seed rates (20, 30, 40 and 50 kg ha⁻¹) on yield and yield components of five coriander lines (line 5, line 11, line 50, line 56 and line 61) at Diyarbakır ecological conditions in 1999-2000 and 2000-20001 growing seasons. In the research, plant height, number of branches per plant, number of umbrella per plant, number of seeds per umbrella, seed yield per plant, seed yield, thousand seed weight, essential oil rate and essential oil yield were investigated.

In terms of seed rates, plant height ranged between 71.95-76.11 cm, number of fruitful branches per plant between 6.32-8.63, thousand seed weight between 12.89-13.23 g, seed yield between 1091.6-1762.3 kg ha⁻¹ and essential oil rate between 0.310-0.333%. However, as far lines, plant height was found to range between 71.47-78.81 cm, number of fruitful branches per plant between 6.87-7.81, thousand seed weight between 12.54-13.60 g, seed yield between 1356.5-1582.5 kg ha⁻¹ and essential oil rate between 0.299-0.343%. Seed rates of 20 and 30 kg ha⁻¹ produced higher seed and oil yield than 40 and 50 kg ha⁻¹, and among lines, the highest seed and oil yield were observed from line 11.

Keywords: Coriander (*Coriandrum sativum* L.), seed rate, yield, essential oil rate