

Cultivation Practices for Paprika Intended for Powdered Spice and Oleorsin

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Breeding of cultivars with high yield and color intensity, as well as the development and introduction of modern cultivation practices have contributed to the expansion of paprika cultivation in Israel. High-quality paprika fruits serve as raw material for spices and for strongly colored oleoresins. Direct sowing is the common practice in Israel. However, plants sown under plastic tunnels and transplanted into the field at the beginning of April as bare-rooted seedlings, matured a month earlier than direct seeded plants. Early maturation is economically advantageous, owing to the extended harvest and processing seasons. Similar yields were obtained by the two methods. No significant differences in yields were obtained for a wide range of variation of distances between the plants in the rows (5-30 plants per meter). Dense plant population in the row is a prerequisite for efficient mechanical harvesting, owing to the small number of fruits per plant, and a reduced tendency for lodging.

A combination of sprinkle irrigation during the establishment stage with drip irrigation during the growing period helps to achieve high yields of paprika fruits. It is advisable to start the drip irrigation when the plants begin to bloom and to apply the final drip irrigation when 80% of the fruits are red. A range of selective herbicides ensures a reasonable eradication of weeds during the growing season: Perlan and Dovrinol as pre-sowing, paraquat and Round-Up as pre-emergence and Laso as post-emergence herbicides showed the best performances.

It is essential to protect the powdered spice from color deterioration, by the addition of antioxidants and/or vegetable oil. The optimal moisture content of the ground spice for maintenance of high quality during storage is 12-14%.

Key words: bare-rooted transplants, direct seeding, once-over harvest, drip irrigation, capsicum.

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