

ONIONS, DRY BULB

Varieties

Fall-seeded (trial): Walla Walla (sweet).

Spring-seeded:

Yellow (cooking)

Frontier, Copra, Tamara, Talon, Milestone, Highlander, Mountaineer.

Yellow (Spanish)

Early (trial): Brahma, Cima, Yula, Early Shipper, Golden Cascade, Magnum, Pinnacle, Zenith.

Red

Red Beauty, Red Bull, Salsa.

See your seed dealer for the most recent variety recommendations.

Soil Temperature

The minimum temperature for germination is 9°C. The optimum range is 16 to 24 °C.

Soils

Peat or muck soils are preferred, but good crops are grown on silt loams and sandy loams.

Seed Treatment

See Onion Smut – (this section).

Seeding and Transplanting

Over-wintered Onions

Direct-seeded:

Seed with a precision seeder as described for spring-seeded onions. Normal seeding date is August 15 – 20.

Seed-beds for Transplant Production:

Usually done the first week of August. Sow 2.75 kg seed for each hectare (1.1 kg/acre) to be set, approximately 35 kg/ha (14 kg/acre) of seed-bed. One hectare of seed-bed will produce enough transplants for 12 hectares of onions. Seed is drilled to a depth of 2.5 cm or slightly less.

Seed may be drilled with a wide shoe attachment which scatters the seed over a 10 cm band in rows with 40 cm centres. The second method is to use a tractor-drawn gang drill which drops the seed thickly in rows 5 to 7.5 cm apart. This results in solid beds with widths depending on tractor wheel settings. The

third method is to drill the seed thickly in single rows 20 to 22 cm apart. In the spring the plants in every other row are lifted and used for transplants. The remaining rows are thinned by hand, leaving a plant every 7.5 cm for a crop. In the Southern Interior, light sprinkler irrigation following the seeding will often be necessary to obtain a satisfactory stand.

In the spring, loosen plants before pulling and tie in bundles of 100 to 200. If being moved any distance, or if transplanting will be delayed, store at 0 to 2°C with relative humidity of 90%. Immediately before planting, trim the plants to leave 1.5 cm of the original root and 10 cm of the green top. Set in rows 40 cm apart, with 6 to 7.5 cm between plants.

Spring-seeded Onions

Onions may be seeded as soon as the land can be made ready, but mid-April is considered ideal. Seeding should be completed by May 1. Approximately 3.25 kg raw seed per ha (1.3 kg/acre) is required. For precision seeding see next paragraph. When using the Planet Junior drill with 10 cm scatter shoe, the drills should be set to drop 11 seeds per 25 cm of row 2 to 2.5 cm deep. Row spacing is usually 4 rows per bed on 1.8 m centres.

Precision Seeding:

This method of placing individual seeds at a predetermined spacing within a row produces a crop of more uniform size, less culls and higher yield. Use coated seed and sow two lines 7.5 cm apart per row with 12 seeds per 25 cm of row. Row spacing is usually 4 rows on 1.8 m beds. With normal coating and spacing approximately 18 kg/ha (7 kg/acre) of seed will be required. This results in a population of approximately 925,000 plants/ha (370,000 plants/acre). See “Precision Seeding” (Chapter 5).

Irrigation

Onions are shallow-rooted, and unless their moisture supply is constant, they will “bulb out” early and the resulting sizes may be small. Four or five irrigations per season are usually required. Irrigation should be discontinued after the first week in August to encourage crop maturity and limit disease development.

Fertilizer

A soil test is necessary to determine phosphate and potash requirements. See Chapter 3 for recommendations based on soil test results.