
C O C K S F O O T

K.R. Brown and C. Lill

Around 1000 ha of cocksfoot seed are entered for certification each year. Average seed yields are 250 kg ha⁻¹ for Grasslands Kara and 400 kg ha⁻¹ for Grasslands Wana, but specialist growers can achieve at least another 100 kg ha⁻¹. In the case of Wana cocksfoot yields of 700 kg ha⁻¹ have been recorded.. Most of the cocksfoot seed crops in New Zealand are in the Methven area.

ESTABLISHMENT-

Site: Sheltered paddocks with soils of medium fertility are suitable for cocksfoot seed production. Shelter is extremely important as protection against strong winds common in the Methven area at harvest time.

Paddock history: As with other grass seed crops cocksfoot should be part of a rotation which allows for good weed control. Cocksfoot for seed should not follow another grass seed crop and should not be sown into areas with known contamination with hair grass, goosegrass, yellow gromwell, wild oats or twitch.

Time of sowing: Cocksfoot seed crops can be sown in the spring (end of September/early October) or autumn. The former allows for better weed control and plant growth than the latter.

Seed-bed preparation: There is no substitute for a firm, moist, clean seedbed.

Sowing rate: Cocksfoot is generally sown at 4-5 kg ha⁻¹ in 45 cm rows. However, 2 kg ha⁻¹ is thought to be adequate if the seed bed is good. Cocksfoot should not be sown with a companion crop,

Fertiliser: Fertiliser should be applied to correct any nutrient deficiencies.

CROP MANAGEMENT

Grazing: Specialist cocksfoot seed crops should not be grazed in the first year; some farmers choose to graze older stands in the autumn and early winter.

Fertiliser: High nitrogen applications are recommended for cocksfoot seed production in Methven. One hundred • 150 units of N (depending on winter rainfall) are applied in early spring in a split dressing.

Fungicide: Cocksfoot is prone to attack by rust. A pre-flowering spray with Tilt controls rust and leaf spot. A follow-up spray post-flowering (3-4 weeks later) may be necessary for complete rust control.

Growth regulators: Cycocel applied at stem elongation and 10 days later (2 x 1 litres) prevents lodging (by shortening the stem) and improves ease of harvesting.

HARVEST

Time of harvest: Cocksfoot is ready to harvest when 60-70% of the kernels have changed from being milky to doughy and when climatic conditions are suitable. Crops to be direct headed can be allowed to stand 1-2 days longer than those to be mown.

Method of harvesting: Hydro-swing windrowers (set low), sickle-bar mowers or rotary mowers can be used; the latter is rapid but seed loss is higher and drying time longer than with the other mowers. The crop should be picked up with lifters as soon as the seed moisture is suitable (around 14%). The concave on the harvester should be tight, with average cylinder speed. Once harvested, the seed should be cooled and dried.

Post-harvest management: Stand-life and cleanliness in terms of weed and disease can be improved by burning. Burning is aided if the straw is chopped during harvesting and spread behind the combine,

Stand life: Cocksfoot seed stands can be certified for up to eight years.
