

Crown field pea



Figure 1: Maple pea cultivars grown commercially in New Zealand.

Crown is a new maple, field pea cultivar bred by Crop & Food Research. It has been extensively trialled in Canterbury where it has produced significantly higher and more stable seed yields than Whero under spring sown conditions.

Crown is more suited to spring sowing than Whero. It has a conventional plant type with a much shorter straw length and determinate growth habit than other purple-flowered, field pea cultivars such as Whero, Mega or Magnus (Fig. 1).

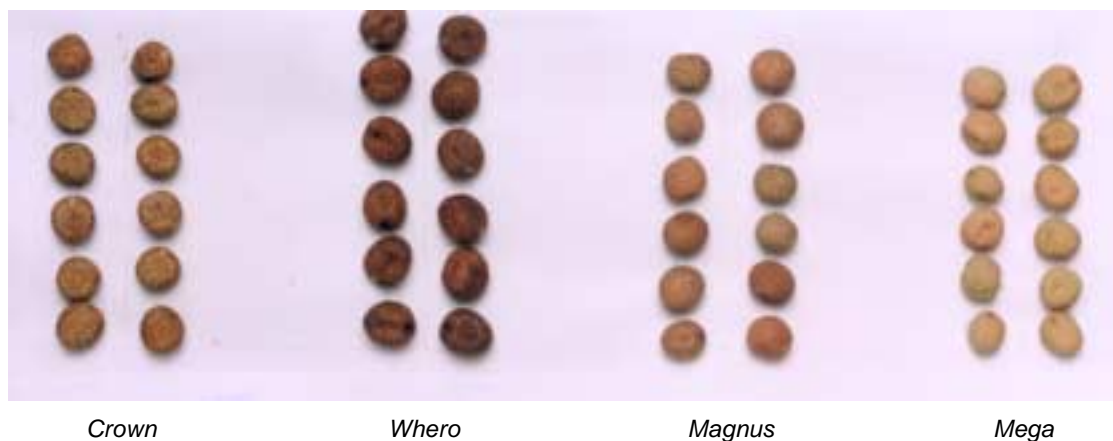


Figure 2: Seed characteristics of purple-flowered, field pea cultivars grown commercially in New Zealand.

Characteristics

Crown has a medium plant height (similar to Rovar or Birte). Purple flowers (one to two per inflorescence) appear at the 16th or 17th node approximately 72 days after sowing. The leaves of Crown are darker green and slightly smaller than those of Whero. They also exhibit less marbling.

The pods are straight with blunt ends and are medium green in colour. One to two pods are present on each node and each pod contains, on average, 5.9 seeds. The dry seed of Crown is drum shaped with the characteristic maple pea testa colour and a yellow cotyledon. Crown seed is significantly smaller than Whero seed (Fig 2).

Crown (like Whero) will lodge from pod-fill onwards and lifters are recommended for harvesting the crop. Several farmers who have grown Crown report that heading the crop in one direction is the most efficient way to harvest it. Crown matures and is ready to harvest slightly later than a crop of Rovar.

Disease resistance

Crown appears to be similar to Whero in its resistance to virus and fungal diseases.

Management

Agronomic practices should be similar to those adopted for shorter strawed field pea cultivars such as Hadlee or Rovar. A target population of 100 plants/m² should be aimed for (sowing rates should be lighter for Crown than for Whero because Crown seed is smaller). The pre-emergence herbicides, Treflan and Gardoprim, and the post-emergence herbicide, Bladex, have been used successfully for Crown, but their use depends on the growth stage and condition of the crop at the time of application. Published guidelines for applying these herbicides should be followed.

Crown (like most field pea cultivars) should respond to irrigation, but high seed yields have been achieved in dryland situations in a typical Canterbury season.

Marketing

Crown will be marketed in New Zealand by Wrightson Seeds Ltd.

Contacts

Sam White
Crop & Food Research
Private Bag 4704, Christchurch
Tel. 03 325 6400
Fax 03 325 2074
Email whites@crop.cri.nz

David Harrison
Wrightson Seed Ltd
Box 939, Christchurch
Tel. 03 349 1810
Fax 03 349 1811