

Quinoa

Three leading farmers in NZ have developed their own supply chains. [Kiwi Quinoa](#) (Dan Cottrell, Taihape); [NZ Quinoa Co.](#) (Dunlop, Taranaki); [Canterbury Quinoa](#) (Methven, in association with few other Canterbury quinoa growers).

Production and Returns

- 3-5t/ha yield. Number of varieties and colours (red and white). Variety grown in Taihape better suited (shorter season) than that in Canterbury.
- Import price/tonne \$4054 (2018). Supermarket or on-line price \$20 to \$30 per kg. This needs to cover costs and returns (profit) to retail, processing, packaging, marketing as well as growers (approx. \$6 to \$7/kg).
- Andrew Barrett in the Maniototo grows this as a greenfeed crop (low input).

Production Risk

- Saponins can result in a bitter taste. Can be selected for low saponins or the seed coat can be removed (washed). Light colour has lower saponins.
- Moisture is needed for early growth (plant in October), after which dry summer and autumn can be tolerated. Harvest can be as late as April-May (flexible timing).

Processing and Market

- Processing capability is required for: harvesting, cleaning, drying, grading, metal detecting, aspirating, extruding. Usually provided by external parties.
- Most NZ quinoa is targeted to replacing imports. NZ Quinoa Co. exports some.

Climate and Soil Suitability

- Short daylengths and cool temperatures for good growth. -4 to 35 C
- 375 - 450mm water requirement. Drought reduces plant height and yields.

Environment

- Medium emissions per unit of land and per unit of product.
- Low N input, low N loss. High risk of sedimentation on cultivated sloping land.
- Low agrichemical risk, nil input after establishment.
- High water use efficiency.

Information and Support

Dan Cottrell provided a pre-recorded talk on quinoa at the 9th February 2023 UTW workshop. This is available on the [Taieri LUDO website](#) under development. Dan will respond to any queries on quinoa. <https://kiwiquinoa.co.nz/pages/contact>
Food and Arable Research (FAR) scientists – Ivan Lawrie has researched quinoa.

References

Speciality Grains & Pulses Report (2019). https://ourlandandwater.nz/wp-content/uploads/2020/05/NGS_190628-LFI-Specialty-Grains-and-Pulses-Report-3.pdf

This [OLW Research report](#) on integrating horticultural and arable land use options has information on the quinoa value chain on pages 18-20.