

## Opportunities for growing organic seed crops

Canterbury, New Zealand – September 2007

### Summary

- Organic seed must be used to grow a certified organic crop if it is available. In practice however, it is often unavailable in which case untreated conventional seed can be sown. Contact Biogro or AgriQuality auditors for more information or see their websites <http://www.bio-gro.co.nz/> or [http://www.agriquality.com/auditing\\_and\\_inspection/organics.cfm](http://www.agriquality.com/auditing_and_inspection/organics.cfm)
- Worldwide there is a huge demand for organic vegetable seed but there is currently a lack of a “critical mass” of certified organic land and farmers in New Zealand to be able to take up the opportunities.
- Organic clover seed is in high demand. Contact Ross Wilson, Midlands Seeds, [office@midlands.co.nz](mailto:office@midlands.co.nz), 03 308 1265.
- There is a big demand for both certified organic and spray-free linseed. Contact David Musgrave of Functional Whole Foods at Geraldine on 03 693.0034, [david@fwf.co.nz](mailto:david@fwf.co.nz), or Ross Wilson of Midlands Seeds (details above) for more information.
- Strong demand exists for some organically grown culinary and medicinal herb seeds such as chives, oregano, thyme, echinaceae and sage. Contact Gerry Ovenden on 03 329.1634, [ovendens@xtra.co.nz](mailto:ovendens@xtra.co.nz).
- Organic grains, seeds and pulses (e.g., wheat, oats, lentils, peas) for human and stock food are in high demand. Premiums are around 100% for certified organic. Contact Harry Lowe at New Zealand Biograins on 03 308.7349, [nzbiograins@xtra.co.nz](mailto:nzbiograins@xtra.co.nz).
- Lupins are well suited to an organic regime and there is good demand. Contact Peter Steven, Steven’s Seeds, [stevensseed@ashburton.co.nz](mailto:stevensseed@ashburton.co.nz), 03 307.8900.
- For more information about the Organic Vegetable and Mixed Farming Association contact field day organiser Raymond Garb, [raymondgarb@yahoo.co.nz](mailto:raymondgarb@yahoo.co.nz) or the chairman, Tim Chamberlain, [tim@harts creekfarm.co.nz](mailto:tim@harts creekfarm.co.nz), 03 324.3549.

Where does the market for organic seeds fit into the picture of rapidly rising demand for anything organic? World-wide, the market for organic goods is rising at about 20% every year. Seeds for planting organic crops, as well as for food and animal consumption, are in high demand. It will be mandatory to use organic seed for the propagation of organic crops at some point in the not-too-distant future, and New Zealand is well suited to take advantage of this niche market.

The Organic Vegetable and Mixed Farming Association brought together farmers and representatives from seed companies to discuss the opportunities for growing organic seed. We met at Kowhai Farm, Heinz Watties Organic Farm at Lincoln University, which is now leased to Leeston farmer Tim Chamberlain. After discussing crop management at Kowhai Farm we moved to the adjacent Biological Husbandry Unit (BHU) meeting room for presentations and discussion.

### **Carrot and other vegetable seeds**

Tim has successfully grown organic carrot seed for Midlands Seeds and has pioneered new techniques. Seed crops are inherently hard to grow, especially organically, because they are in the ground for a long time compared with a crop for the fresh market – a carrot seed crop is in the ground for over a year.

To overcome potential weed and pest problems, Tim plants carrot seed in a nursery bed, then transplants the carrots in spring into a clean paddock, thus overcoming the burden of weeds that may have built up in winter and spring in direct sown crops.

Last year's wet and cool conditions were conducive to high aphid numbers and poor pollination. Tim used a fungal bio-control from Crop Solutions to help control aphids – this worked well in the cool conditions.

Ross Wilson of Midlands Seeds, Ashburton anticipates that demand for carrot seed and other vegetable seeds will rise when organic regulations come in regarding the sowing of organic seed for certified organic crops. Clover seed is an organic seed crop in demand but is difficult to grow organically because of the change in cultivar regulation, but Ross would be interested in hearing from growers who are keen to try. At the moment there is a lack of a “critical mass” of farmers and certified land to take advantage of overseas demand for vegetable seed, but this could change. Technology is improving all the time which makes growing organic seed more straightforward, such as GPS guided implements and the increasing availability of effective biocontrol agents.

### **Linseed**

There is very strong demand for organic linseed. David Musgrave, of Functional Wholefoods at Geraldine, processes linseed into oil for the health food market. To satisfy demand, he could take five times the amount of certified product that he has now. He is also interested in contracting growers to supply spray-free linseed – he would like 500 tonnes this season.

Linseed is a relatively flexible crop to grow with respect to planting time; it is also fairly low-fertility and moisture demanding and cheap to sow. However, harvesting can be problematic, as the stalk remains “chewy” well after the seed is ripe. This can mean birds take advantage of a free lunch before headers can get into the crop. If harvesting is delayed by poor weather, losses to birds can be high. Use of a “stripper-front” on the header means this risk is lowered significantly.

New linseed cultivars are looking promising: the golden variety can be sown later and has a shorter time to maturity. This variety can be planted after the harvest of an early pea crop. Gross margins are good and yields are around 2 tonne/ha. Farmers would be paid \$750/tonne for spray-free linseed, and \$2000/t for certified organic.

### **Organic herb seeds**

Demand for culinary and medicinal herb seed is strong. Gerry Ovenden, from Leeston, is a conventional grower of herb seeds, but is interested in procuring organic seed for some of his customers. So if having fields of flowering herbs

appeals, here's your chance. The main ones Gerry is interested in are chives (plain and garlic), oregano, sage, thyme or echinacea (purpurea or angustifolia).

Prices range from \$30/kg for crops that could be expected to yield 1500 kg/ha to \$220/kg for echinacea purpurea (expected yield 700-800 kg/ha). Organic premiums range from 25-100%. Most herb species are perennials, so once established, they will yield for many years. Most of the herbs are not high fertility demanding and like a neutral pH. The tricky aspects of growing are the weed and disease control.

Gerry has a narrow fronted header which he can put on a truck to harvest seeds locally and would be happy to take over management when the crop was ready to harvest.

### **Grain and pulses for human and stock food**

With organic premiums at 100% and a huge global demand, grains, pulses and seeds for food can be a good option for organic arable farmers. Harry Lowe of New Zealand Biograins at Ashburton, said their business would buy any organic grains or pulses. Importing product is now difficult because of the compliance costs and the phytosanitary requirements that demand proof that germination has been destroyed.

Rather than importing to meet the shortfall, Biograins now concentrates on processing what they can source locally. They have recently put in a stock food processing plant, which Harry sees as a huge growth area due to the rapidly expanding organic dairy and egg industries.

Lupins are a crop well suited to growing organically and being high in protein are ideal for use in stock food mixes. Traditionally soy has been the protein source in stock food but organic soy is hard to get and prohibitively expensive. Peter Stevens, of Stevens Seeds said lupins are not prone to disease, and as nitrogen fixers, do not require a high fertility soil. They are also in demand as an export crop to the Middle East where they are a traditional food.

### **Certification requirements**

Biogro and AgriQuality regulations state that organic seed must be used if it is available, however, if unavailable, conventional seed may be used provided it has not been treated with pesticides. If untreated seed is unavailable, treated may be used with written approval. At this stage, certified organic seed will have to be used after 31 December 2009, however this date may change as it has before because of the lack of supply of organic seed.