Lentil Agronomy

Rob Launder - The Lentil Company

Where do lentils fit into a rotation?

Lentils are best to be used as the last legume crop in a rotation as the volunteer lentils are hard to control in other legumes also there survival will carry over disease such as botrytis and ascochyta (not the same strain that affects field peas).

Lentils can be sown before and after cereals and most oilseeds even after other pulses if disease such as botrytis haven't been a problem in that paddock. It would not be advisable to sow lentils back on a vetch stubble as it is very hard to spray and grade out vetch in lentils and you will loose a percentage of lentils in the process.

Paddock Selection

This decision could be the make or break of any lentil crop. Avoid paddocks that are prone to water logging as lentils are the most susceptible to water logging out of all the pulses especially at the flowering stage. Consider the past herbicide history such as Lontrel and the sulfonurea type herbicides as lentils are the most sensitive to these compared to some of the other pulses. If there has been a problem with diseases such as botrytis or ascochyta lentis in the paddock in the last 3-4 years you should avoid growing lentils in these paddocks. Lentils are poor competitors with weeds therefore it would be advisable to choose a paddock with low weed pressure.

Paddocks with vetch problems in them should be avoided as vetch is hard to grade out of lentils so you risk either down grading of the product or extra cleaning costs. Delivery specifications include a vetch tolerance of 2 per 200 grams of lentils at some delivery points.

When harvesting lentils you are very close to the ground so it is important to choose a level paddock with few stones and stubble that can be managed so as not to leave any lumps of straw and dirt. Lentils require a soil pH of 6 and above to grow in, preferring more alkaline soils.

Crop Management

Lentils should be sown in the middle of your cropping program, in the Mallee a May sowing would be ideal; in the Wimmera you would be aiming around a late May to mid June. It is important to sow with good quality, disease free seed. Sowing rate varies depending on variety and of course seed germination. You aim for a plant population of 100 - 125 plants per square meter. Sowing rate varies from about 40 kgs/ha for the smaller seeded red variety up to around 60 kgs/ha for the largest green variety. Inoculation of lentils is required in areas where field peas need inoculation. Lentils seem to have the same fertiliser requirement as other grain legumes. Lentils can be sown at depths of 5 - 6 cm which is important to help minimise the risk of damage from some of the herbicides. There are only a few herbicides registered for weed control in lentils at this stage, the latest to receive registration is DuPonts Lexone which controls a range of broadleaves. There are a number of products registered for grass control in lentils.

Red legged earthmites and lucerne flea can cause problems in lentils especially in the early vegetative stage of the crop. Native bud worm and the larva of the etiella moth can both damage lentils at pod formation to maturity. The native bud worm is easy to control but the etiella moth is more difficult as the larva move straight into the pod after hatching. We are looking further into he problems of controlling this pest. Lentils have a few disease problems the main concerns at this stage being ascochyta lentis (different strain that affect field peas) and botrytis (grey mould which affects chickpeas) some varieties have more resistance to ascochyta

than others but these ones appear to be less resistant to botrytis. Paddock selection, time of sowing, seed treatment ad disease testing will help combat these problems. Application of fungicide spray will also help in controlling these problems.

Harvesting Lentils

The harvesting of lentils is a task that seems to concern most new growers. Lentils usually form pods right down to the ground which means you will be harvesting these. Flexible cutter bars on headers makes this job easier, but for the grower with the standard front there are a few things that will help you. Make sure you have left the ground as flat as possible after sowing and with any spraying required avoid spraying when it is too wet as not to leave wheel tracks through the paddock.

It is important to harvest lentils when they are ready. If the lentils are ripe, leaving them standing in the paddock can cause a few problems such as pod loss also if there has been a disease problem that they can deteriorate by being left standing in the paddock.

Marketing

With the inevitable increase in the size of the lentil crop, this coming season should not create any apparent major problems on the marketing situation. In addition to the quality container trade we may have to place some bulk shipments into some of the high volume markets.

Price looks as though it should hold at this stage. We have an old player back in the market who would take 20-30,000 tonnes of red lentils a year. World red lentil stocks are low and the further penetration of Australian lentils into more countries (The Lentil Company os now exporting to 26 countries compared to 16 for the same period last year) is an encouraging sign.

Turkey and Syria are the major players in the red lentil market and Canada being the major player in the green lentil market. At this stage we don't see Canada moving to a large area of red lentils even with the down turn in the price of the green lentil market but they will be increasing their area and will need watching in the next few years.

