



## LUPIN BULLETIN (All Lupin Types)

Number 2/19

The recent rainfall has benefited the establishment of spring crops this year. As a result, most crops are doing reasonably well.

We are sorry if this bulletin reads like a terrifying list of potential ailments, but please understand that we have to cover all possibilities. For most growers, weed control is the most relevant issue, and the other ailments are far less likely possibilities.

### YELLOWING

It is common at this time of year, particularly on heavier, more compacted soils, to see a paleness or yellowing in the Lupins which usually lasts for around a week or so. This is a temporary shortage of nitrogen in the crop as it "switches" from residual nitrogen to its own "home-made" nitrogen from the nodules, and this is perfectly normal. It also sometimes leads to other deficiencies showing up as a secondary effect, such as manganese deficiency which will also produce a general yellowing with a brown "spotting" effect on the leaves. We expect this to correct itself as the weather warms up, and the lupins begin to fix nitrogen and get away.

### WEED CONTROL

Pre-emergence weed control has been fairly good this year due to the availability of moisture, but it is inevitable that there will be crops that will have a weed issue. **Now is the time to check for adequate weed control.**

Our various attempts to secure an EAMU for the use of "Hurricane" in lupin crops have been unsuccessful so Soya UK are unable to recommend its use to you at this time, (much as we would like to). This would have been a cheap, effective, crop-safe option for post-emergence weed control, which is commonly used abroad, but our efforts have not met with success.

The happy news however, is that there is now an EAMU for the use of Lantagran in Lupins, which will make life a lot easier. Lantagran now offers a legal post-em option where one was not available before.

**Check your crop now, and if you find a lot of small weeds starting to establish themselves, then action is required now.**

### Using Lantagran

Lantagran is good on a number of weeds, but it is useless on volunteer OSR. See table below for weed susceptibility. The good news is that it seems very good on some tricky weeds like nightshade, but **if you have a serious flush of volunteer OSR or redshank, then better to give us a call.**

- Lantagran depends on coverage to work, so it is essential you apply it in such a way as to achieve good coverage of the weeds.
- This means using a high water rate and a fine spray quality.
- Apply to a dry crop if possible.
- Using crop oil gives only a marginal benefit.

Product	Rate	Water Volume	Spray Quality
Lantagran	1.5 lt/ha	250 - 350 lt/ha	Medium / Fine



### Lentagran weed susceptibility at 1.5 Kg/ha – actively growing weeds at 2-4 leaf stage

Susceptible	Moderately susceptible	Moderately resistant
<b>Amaranthus</b>	Black bindweed	Annual meadow grass
<b>Black Nightshade</b>	Charlock	Crab Grass
<b>Bugloss</b>	Common Chickweed	Corn poppy
<b>Cleavers</b>	Cockspur	Field Pansy
<b>Cranesbill</b>	Field penny cress	Knotgrass
<b>Corn Marigold</b>	Mayweed	Volunteer OSR
<b>Fat hen</b>	Orache	Wild mustard
<b>Fumitory, common</b>	Pineapple weed	Wild radish
<b>Field Speedwell</b>	Redshank	
<b>Forget-me-not</b>	Small nettle	
<b>Gallant soldier</b>	Scentless mayweed	
<b>Groundsel</b>	Shepherd's purse	
<b>Hemp nettle</b>	Stinking mayweed	
<b>Ivy leaved speedwell</b>	Spurge, sun	
<b>Nipplewort</b>	Scarlet pimpernel	
<b>Red dead-nettle</b>		
<b>Sowthistle spp</b>		

### DISEASE (PLEASE READ THIS)

There is only one significant lupin disease in white lupins – Anthracnose. (pr. Ann-thrack-nose).

Anthracnose can be very damaging in extreme cases, however it can be controlled with relatively simple and cheap sprays, which are extremely effective. If you see this disease, you should act immediately and let us know, however we do not want to concern you unnecessarily, and induce a flood of unnecessary phone calls to our office, so follow these simple rules for identification first. Identification of the disease is very clear, and easy, and if it doesn't fit the description, it probably isn't anthracnose.

- Anthracnose begins from one infected plant, which in turn infects its neighbours. As a result you will see random patches, perhaps only a metre or two across, where the infection has started.
- In the early stages, stems crook over in a shepherd's crook shape. This is the classic symptom, and the one to look for. This is often accompanied by a twisting of the plant.
- To begin with, the plants appear to have "rubbery" stems which are incapable of holding the plant vertical, hence the crook shape. Within a few days, a lesion will develop in the crook. The lesion is usually brown with a white, pink or orange coloured centre.
- Most commonly found in white lupins, (if found at all), but can affect all 3 types of lupin.
- Treatment is quick and usually very effective with very good recovery.

### OTHER DISEASES

Blue & Yellow lupins very occasionally get anthracnose, but it is really quite rare. They also get fusariums, stemphylium grey spot, pleiochaeta brown spot, or botrytis, however, these are late in the season and also quite unusual. We do not expect you to see these diseases, but if you do observe some kind of disease affecting your crop, contact us straight away.

Product choice for control of Anthracnose and other diseases, generally involves the use of a Chlorothalonil product (eg Bravo), combined with a Metconazole product - several of which are approved in Lupins including Caramba, Metal, Gringo, etc,etc

**Bravo + Metconazole  
(60g)\***

**1.5 lt/Ha + 0.6 lt/Ha**

**200 litres/Hectare Water**

\* It is worth noting that there are generally 2 versions of Metconazole on the market, either containing 60grammes/litre of metconazole, or 90 grammes of metconazole. The above recommendation is based on the 60 gramme version, so adjust rates accordingly.



## CHECK FOR NODULATION

As long as they are present, the root nodules will provide all of the crops Nitrogen needs from now on. Nodules are forming now, so it is worth checking in the next couple of weeks, just to confirm they are present. If you cannot find any root nodules please be patient. Where we have used the inoculant, we have never had a crop fail to nodulate, and often their formation is only when the warm weather begins to get strong growth underway.

- Dig up (not pull up) a few plants and hand tease the soil off the roots.
- The majority of nodules will be where the stem joins the roots (at the original depth of planting).
- Nodules should be easily found on most (but not necessarily all) plants.
- If your crop has no root nodules please be patient. Where we have used the inoculant, we have never had a crop fail to nodulate. – DO NOT RUSH OUT WITH ANY NITROGEN.

## FLOWER COLOUR

White lupins usually have a blue-white flower – this is normal – it does not mean it is a blue lupin. Equally, you get blue lupins (*lupinus angustifolius*), which have white, blue and blue-white flowers. The names of the different lupin species are regardless of flower colour, so if you are growing a white lupin, and it has blue-white flowers (or vice-versa), don't worry – it is normal.

## BEES and HONEY

Growers have often asked about putting bee hives on their crops. This is OK for commercial growers, but **seed growers should definitely not do this**. We prefer seed crops to self-pollinate, rather than cross-pollinate. This helps maintain varietal purity.

## GRASS- WEED CONTROL

Lupins offer an opportunity to get a firm grip of grass-weed problems. Most of the proprietary graminicides can be used in lupins. Please consult your chemical supplier on rates.

## SUMMARY

Go out and have a look at your crop and assess the weed situation. Keep an eye out for anthracnose, Delia bean fly, yellowing, do some plant counts, and check for nodulation whilst you are there. The most important of these is checking the weed situation. All being well, in common with most growers, you will hopefully find no action is required.

Always read the label carefully before using pesticides and only use as directed therein.

Use pesticides safely.

Soya UK Ltd. recommend you seek the advice of your chemical advisor regarding your particular situation prior to applying pesticides

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