Following the dry spring and summer in central and southern NSW cropping areas, there is potential for herbicide residues to still be present in the soil when sowing commences in autumn, unless there are milder temperatures and good moisture at least a month or more before sowing.

**BEST BREAKDOWN**

Warm, moist soils are required to breakdown most herbicides through the processes of microbial activity. For the soil microbes to be most active they need good moisture and an optimum soil temperature range of 18°C to 30°C. Extreme temperatures above or below this range can adversely affect soil microbial activity and slow herbicide breakdown. Very dry soil also reduces breakdown.

To make matters worse this year, like 2012, the soil profile is very dry and requires a lot of rain to maintain topsoil moisture for the microbes to be active for any length of time. Even though some areas have recently received reasonable rainfall, it still may not have been enough to keep the topsoil moist for a week or more to activate the microbes. Most of the recent rain has quickly disappeared into the sub-soil where there is little microbial activity. Hopefully, we will soon get more rain as the temperatures become milder so that soil microbes can be most active.

### Timing and volume of Rainfall

There should be at least 25mm of rain which falls during spring, summer or early autumn (post application) to enable the soil to be wet for approx 1 week so that soil microbes become active and breakdown carryover of Lontrel products in the soil.
WHAT IS DIFFERENT IN 2013/14?

1. Very dry, hot spring and summer so far, with very little opportunity for soil microbial activity.

2. If we do get rain and the temperatures become milder, then we are likely to need substantial rain (more than the 25 mm as per the label) to wet the sub-soil so the top-soil can remain moist for a week or more. This allows the microbes to be active in the top-soil where most of the herbicide residues will be found.

3. Many more paddocks have been treated with Lontrel products in 2012 and 2013 than in the past because of the very effective control of fleabane germinations they provide. This means that many paddocks that were treated with Lontrel products in 2013 may not be able to be planted with sensitive crops like legume pastures (eg. clovers, lucerne or forage legumes) or pulse crops (eg. lupins, field peas, faba beans or vetch) in 2014. Of these crops, lupins are the most tolerant of Lontrel products residues, but they may still be injured if there are significant soil residues present.

THE RISK

If these dry conditions continue until just before sowing, it will be a high risk to plant any sensitive crops in paddocks that have been treated with Lontrel products in 2013. Cereals or canola would be much better options as these crops are not affected by Lontrel product residue.

Rate

The higher the rate that is applied the longer the time to plantback to sensitive crops. This factor is very important in the case of high rates being applied to control weeds such as fleabane going into the summer fallow.

CROP OR WEED INDICATORS

A good indicator as to whether the residues are still in the paddock is a good population of sub-clover or sensitive weeds growing healthily throughout the paddock. If they appear healthy, then it’s very likely that a sensitive crop will be able to be planted without any concerns.

OTHER DOW AGROSCIENCES PRODUCTS

For growers in southern NSW that have used Tordon™ 75-D, Tordon 242 or Grazon™ Extra in crop or fallow in winter, spring or summer during 2013, only plant cereals or canola in these paddocks in 2014. Torpedo™ should be treated the same as Lontrel products if this dry weather continues. There should not be too many plantback issues with the other broadacre products in the Dow AgroSciences range.

Dow AgroSciences representative on TOLL FREE 1800 700 096 or visit www.dowagrosciences.com.au