

## Nitrogen Timings for Winter Crops



### **Winter Wheat**

Four timings to consider for autumn and early winter sown crops, first three are for yield, the fourth for milling quality where required.

- 1) Mid February – Early March  
20% - 30% of total dose, except well-tillered, lush canopies and where lodging risk is high. Stressed and backward crops may benefit from splitting this application, because they will only be able to utilise small amounts of nitrogen at this stage.
- 2) Late March – Early April  
50% - 70% of remaining balance, just before or by early stem extension.
- 3) Mid April (2 weeks after previous application)  
Remaining balance for yield production GS32-33
- 4) Milling varieties  
40kg/ha at GS37 (flag leaf emergence, mid May) and/or 35lt/ha Crest Pro-N at GS71 (mid June) alone or in a fungicide/insecticide tankmix.

### **Winter Barley**

Two key timings for both Malting and Feed crops

- 1) Late February – Mid March  
50-60% of total dose
- 2) Late March  
Balance of total nitrogen dose at GS30-31

### **Winter Oats**

Splitting the total N dose will give a yield response but can lead to increased lodging.

- 1) Late February – Mid March  
30kg/ha – 60kg/ha where total dose is greater than 100kg/ha and lodging risk is low
- 2) Late March – Early April  
Balance of total nitrogen dose during stem extension (GS32-33)

### **Winter Oilseed Rape**

Three key timings for optimum yield production, however the first two applications can be and often are split into three. The ratio of application dose can vary depending on the likelihood of lodging.

- 1) Mid February – Early March  
Approx 50% of total dose now, apply early to backward crops and delay to thick forward crops
- 2) Late March – Early April  
Apply balance of total dose before crop height effects spread pattern.
- 3) Mid May - Late May  
Apply 40lt/ha - 50lt/ha Crest Pro-N alone or in a fungicide/insecticide tankmix.

## Winter Linseed

Two important application timings

- 1) Mid March  
65% of total dose
- 2) Mid April – Late April  
35% (balance) at green bud stage of crop

Application Notes:

Intended total nitrogen rates should be planned and agreed with a FACTS qualified adviser based on Soil Nitrogen Supply Index and taking account of previous field experience, yield potential, crop canopy and other variables.

Take account for nitrogen availability in any organic manure that has been applied.

Urea vs AN – if using urea as the primary source of nitrogen fertiliser, apply early in application windows and apply bigger proportions of the total nitrogen dose earlier in the programme. This should also be a management consideration with either form of nitrogen fertiliser if drought conditions are expected.

Always follow good agricultural practice guidelines with respect to nitrogen applications and environmental protection.

Sulphur – if not applied as Brimstone 90 elemental sulphur in the autumn/winter apply sulphur in N:S fertilisers either early in the season if to be applied in one dose or little and often with a lower percentage sulphur product.

Conversion table for products containing 34.5% nitrogen

Product Rate		Nitrogen Rate	
Kg/ha	cwt/ac	Kg/ha	Units/ac
125	1	43	34.5
187.5	1.5	65	52
250	2	86	69
312.5	2.5	108	86
375	3	129	104
437.5	3.5	151	121
500	4	173	138
562.5	4.5	194	155
625	5	216	173
687.5	5.5	237	190
750	6	259	207