## Soils, Nutrients and Fertiliser Factsheet

## Spring Malting Barley



## Spring malting barley

Fertiliser management is key in the production of quality malting barley crops and this should begin at drilling

- Ensure soil pH of 6.5 for malting barley low pH will restrict the availability of N, P, and K to the plant
- Consult your soil test results
- For soil Index 1 to 3, match P and K application to crop offtake
- For soil Index 4, where soil pH is less than 7, no P & K is required; where pH is over 7, apply a maximum of 20 kg P/ha
- In the absence of soil samples, assume Index 3 for both P and K
- Where possible, combine drill P and K as this will improve rooting and tillering especially on low P and K soils. Alternatively, incorporate P and K into the seedbed pre-drilling
- Where organic manures have been incorporated, alter chemical N application rate to avoid high protein grain if possible, avoid distilling grade barley on such sites

## Nitrogen management

Management of N input to crops is the key factor in keeping grain protein low. Before planning crop N inputs consider the following points:

- Apply 30% of the crop's N requirement at drilling
- Apply the remaining N at the 1 2 leaf stage (Tramlines visible)
- Late application of N, post GS 32, will adversely affect grain protein content i.e. levels may be higher than desirable



Table 1. Example nitrogen application strategy for brewing barley



| Total N        | Seedbed       | 1 – 2 leaf stage |
|----------------|---------------|------------------|
| 135 kg/ha      | 40 kg/ha      | 95 kg/ha         |
| (108 units/ac) | (32 units/ac) | (76 units/ac)    |

Table 2. Example nitrogen application strategy for distilling barley

| Total N       | Seedbed       | 1 – 2 leaf stage |
|---------------|---------------|------------------|
| 110 kg/ha     | 30 kg/ha      | 80 kg/ha         |
| (88 units/ac) | (24 units/ac) | (64 units/ac)    |

Note: Reducing N application rate below the recommended in the tables could have a direct impact on crop yield and performance. Given the current high value of malting barley it is not advised to reduce rate any further as this will reduce tonnes produced and profitability



