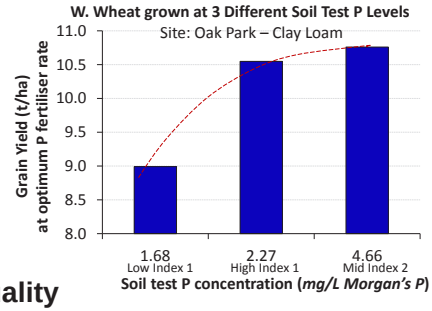
Soil fertility targets

Why Build Soil Fertility?

- **Higher yield potential**
  - Winter Wheat + 1.5t/ha
  - Spring Barley + 2.0t/ha
- **Improved crop establishment**
- **Efficient fertiliser use**
- **Healthier crops**
- **Lower variability in grain & quality**
- **Increase profitability**



Soil Fertility Targets

- ✓ **pH 6.5 to 6.8**
- ✓ **P Index 3 (>6.0 mg/L)**
- ✓ **K Index 3 (>100 mg/L)**

Notes:

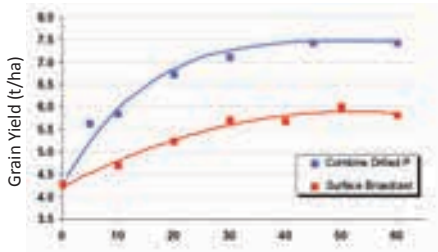
Role of Phosphorus (P)

P is essential for crop establishment

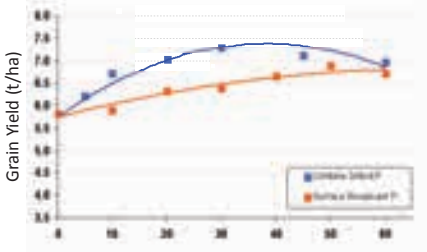
- Supports early plant growth
- Drives plants energy cycle
- Plant root establishment
- Tiller development
- Seedling survival when soils are cold

P fertiliser application method on low P fertility soils

Spring Barley: P Index 1 Soil



Spring Barley: P Index 2 Soil



Notes:

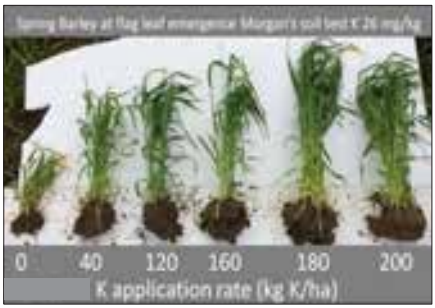
Role of Potassium (K)

K is important for nutrient cycling and robust crops

- Increased nitrogen efficiency
- Improved disease resistance
- Drought tolerance
- Reduced straw breakdown

K fertiliser drives tiller survival & supports grain fill

- Cereals have high K demand
- Top up K based on crop yield
- Monitor K using soil tests
- Apply high K compound
- Consider MOP 50% K fertilizer

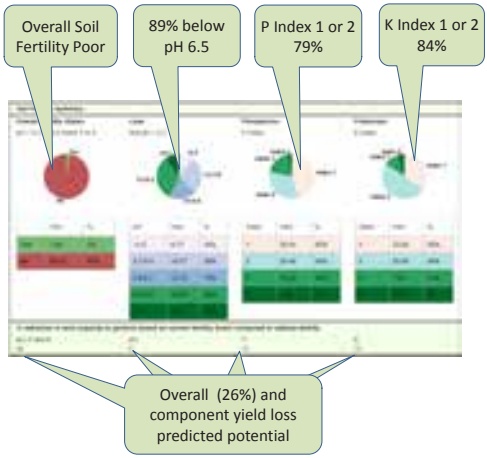


Notes:

NMP online – fertiliser planning

Know your Soil Fertility
- pH and lime requirement
- Soil P
- Soil K
- Overall Fertility

NMP Online Fertiliser Plan Combining
- Teagasc Recommendations
- Nutrient advice maps
- Nitrates Limits



Soil pH and Lime Map

Soil P Index and Organic Manure Map

Plan your Lime & Fertiliser to
- Build soil fertility
- Increase fertiliser efficiency
- Maximise crop yields

Notes: