

Faba Bean Molybdenum Trial

Molybdenum Application

Molybdenum is required by plants as part of the process of converting soil nitrate to amino acids, as well as by the rhizobia in root nodules in legumes that fix atmospheric nitrogen (N₂).

Traditionally clover pastures were fertilised with moly super, but the practice seems to be rare these days. So with the rise in the popularity of faba beans, is there sufficient soil molybdenum to ensure nitrogen fixation is not limited?

Molybdenum as Molytrac, thanks to assistance from Yara, as either as a seed dressing (3 l/t) or as a foliar spray (500ml/ha).

Tissue tests taken in August had shown an increase in plant moly levels, but the control (no moly applied) had adequate levels (> 0.5 mg/kg).

Examination of the roots of the plants showed no appreciable difference in nodulation between the treatments or colour differences inside the nodules (a functioning nodule is pink/red inside whereas a non-functioning nodule is green/pale).

Treatment	Yield (t/ha)	Tissue Test Molybdenum (mg/kg)
Control	6.24	0.67
Foliar Moly	5.89	1.30
Seed + Moly	5.85	1.40
p	0.693	Adequate Mo >0.5 mg/kg
lsd	NS	
cv%	9.8	

Harvest results confirmed that the moly levels in the control were adequate, with yields similar across the three treatments.