

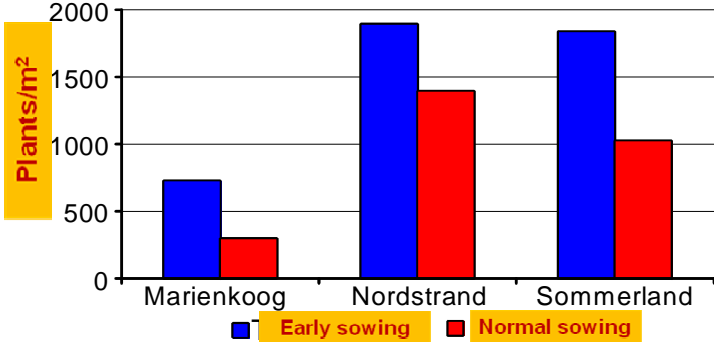
CONTENTS & MODULES

MODULE 17



Grass weed management with IPM

Date (20/10/2010)

WHAT IS...	In crop rotations dominated by winter crops and, especially cereals, problems with grass weeds are very likely to increase, as the life cycle of many grass weed species matches that of the winter crops.												
WHY	In many cases, grass weeds are effectively controlled with herbicides. However, increasing incidences of herbicide-resistant grass weeds are being reported, which is why alternatives are needed. These alternatives include both preventive and curative measures.												
HOW	<p>The major tool to prevent the proliferation of grass weeds is crop rotation. Increasing the amount of spring sown crops will depress the development of winter annual grass weed species. However, changing the crop rotation is often very costly to the farmer, due to decreases in productivity. Other measures include:</p> <ul style="list-style-type: none">▶ Delayed sowing▶ Optimal plant density▶ Focused soil cultivation▶ Glyphosate before sowing the main crop▶ Optimised use of herbicides (through monitoring, adjusted dosages etc). <p>It is, however, always important to focus on the total farm economy before implementing these measures.</p>												
EXAMPLE	<p>The amount of <i>Alopecurus myosuroides</i> has, in German experiments, been proved to increase with early sowing:</p>  <table border="1"><caption>Plants/m² of <i>Alopecurus myosuroides</i> by region and sowing time</caption><thead><tr><th>Region</th><th>Early sowing (Plants/m²)</th><th>Normal sowing (Plants/m²)</th></tr></thead><tbody><tr><td>Marienkoog</td><td>~750</td><td>~300</td></tr><tr><td>Nordstrand</td><td>~1900</td><td>~1400</td></tr><tr><td>Sommerland</td><td>~1850</td><td>~1050</td></tr></tbody></table>	Region	Early sowing (Plants/m²)	Normal sowing (Plants/m²)	Marienkoog	~750	~300	Nordstrand	~1900	~1400	Sommerland	~1850	~1050
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SOURCES	<p>On the ENDURE website:</p> <ul style="list-style-type: none">▶ Leaflet on IPM in winter crops based cropping systems▶ On the ENDURE Information Centre												