

Increased seed rate in winter cereals

A competitive crop is an important guard against weeds. Increased seed rates is a tool to improve crop competition on soils with a high pressure of grass weeds

DID YOU KNOW?
Increased seed rate can improve weed suppression with 10-20 %

Readiness for use: 

Efficacy: 

How it works

Seed rates in winter cereals should be increased on soils with a high weed pressure. A quick and dense soil cover with a crop biomass will help competing against grass weeds

- Higher seed rates than normal will result in an increased biomass in the crop row
- Seed rates should be increased by 20-50 % compared to normal seeding rate
- Increased seed rates can improve weed suppression with 10- 20 % if weed pressure is high
- Increased seed rates combined with delayed sowing is a good weapon against weeds on soils with heavy grass weed infestations
- It is ideal to make prescription maps for variable rate sowing
- Variable seed rates takes differences in the field into account. Rates can be adjusted for well-known differences e.g. differences in soil and microclimate that influence plant emergence and survival
- Many seed drill machineries are capable of using prescription maps for variable sowing

Table 1. Effect of increased seed rate in combination with delayed sowing on black grass in two Danish trials (Landsforsogene) without weed control in 2012.

Increased seed rate in combination with delayed sowing	Trial 1		Trial 2	
	Black grass ears/m ² in July	Wheat yield t/ha	Black grass ears/m ²	Wheat yield t/ha
Normal seed rate, normal sowing date	206	48	135	54
Normal seed rate + 20%, normal sowing date	180	41	98	67
Normal seed rate + 20%, normal sowing date + 2 weeks	93	81	80	68
LSD		7,1	5,8	

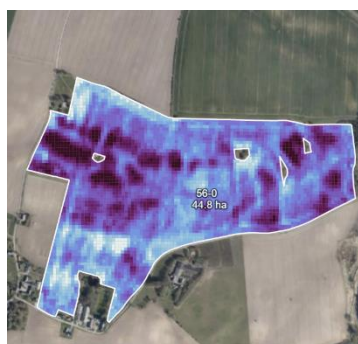


Figure 1. Prescription seed rate map made from a biomass map from an earlier year. The lower biomass, the higher seed rate, illustrated as darker colors. Variable rate seeding (average rate +/- 25 %) in hybrid winter barley, (Illustration. CropManager.dk).

CONTACT

SEGES
INNOVATION

Jens Erik Jensen
SEGES Innovation P/S
ijnj@seges.dk
+45 2171 7706

Marian D. Thorsted
SEGES Innovation P/S
mdt@seges.dk
+45 2475 7914



AARHUS
UNIVERSITET

Bo Melander
Aarhus University
bo.melander@agro.au.dk
+45 22 28 33 93