

UK SUGAR BEET CROP DEFENDER

ROOTGUARD

A blend of Mustard seeds

THE BEST TACTIC

FOR

**ECONOMICAL AND ECOLOGICAL
FARMING SYSTEMS**

AND

INTEGRATED PEST MANAGEMENT

Your objective

Reach to a good tilth
Reduce exposure to
SBCN
Control exposure to
soilborne diseases
Inhibit weed pressure
Cost effective scheme

Your strategy

Make full use of the
newly bred mustard
seeds performances by
intergrating the Mustard
seeds blend in your
rotation prior to your

Your benefits

Soil structure improved
Increased of leaving
humus
Soil biological activated
Efficient integrated pest
management
Eligible to the ELS
(Stewardship scheme)

Direct Benefits

**Higher quality yield
Less input costs**

within 90 days

**Highest concentration of
active compounds
allelopathic compounds at
flowering and early pod
setlings stage**

Indirect Benefits

**Favoured by the
campaign
for Farmed
Environement
Eligible to ELS
(Stewardship scheme)**

**Up to 10 mt of active
Biomass in the upper system**

**Up to 4 mt of active
Biomass in the root system**

ROOTGUARD

Blend containing **exclusive and unique non GMO Mustard seed** varieties bred in Idaho, by world scientific leaders in developing mustard seeds with designer high glucosinolate content and quality suitable as a natural alternative to highly toxic synthetic soil fumigants.

YOUR CHOICE FOR A LEADING EDGE CHOICE

KNOWLEDGE TO SHARE

ROOTGUARD

Designed for Integrated Sugar beet Pests Management in line with new regulations

What is ROOTGUARD ?

Blend of Mustard seeds varieties
Uk National List registered in 2010
Seeds of EU origin
Certified as per EU standards and seedsman practices
Resistant to Cyst nematodes
Non Gmo

How to use ROOTGUARD ?

TSW 3.06 g +/-
Drilling depth 1-2.5 cm
Date of planting July August September
Optimal heat units day 800° C
Germination above 16°C 5 days
Drilling options in line drill / autocast

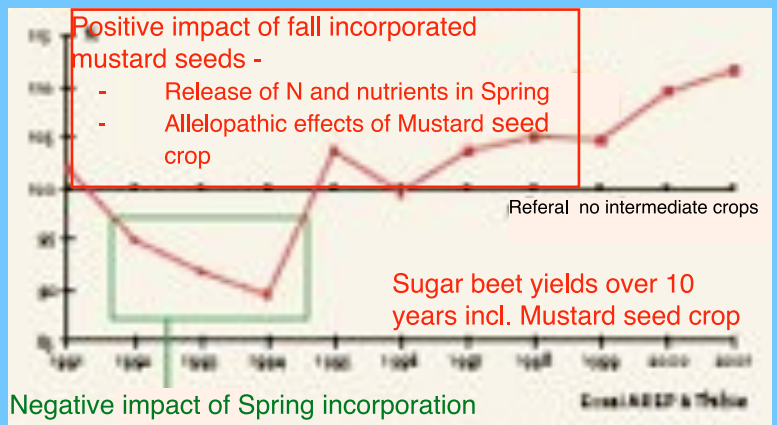
Drilling date	Drilling methode	Soil type	Density adjustment
July	In Line drill	Heavy soil	+10%
		Light soil	0%
	Auto-cast	Heavy soil	+20%
		Light soil	+20%
August	In Line drill	Heavy soil	+20%
		Light soil	+10%
		Auto-cast	Heavy soil
	Auto-cast	Light soil	+25%
		Heavy soil	+30%
		Light soil	+25%
September	In Line drill	Heavy soil	+30%
		Light soil	+25%
		Auto-cast	Heavy soil
	Auto-cast	Light soil	+30%
		Heavy soil	+25%
		Light Soil	+25%
Spring Freeze drill	In Line drill	Light Soil	+25%

What makes ROOTGUARD so special?

Mustard seeds blend contains naturally occurring glucosinolates in unique concentrations - identified for their efficacy against Potato pests and parasites
Seeds contain up to μmol 303 total

Glucosinolates including 2-propenyl glucosinolate at 99% that will produce, in quantity ALLYL THIOCYANATE

Most efficient source for pests control with effect on SBCN - Rhizoctonia -



SBCN BEST PRACTICE MANAGEMENT

+ 10-12 DAYS

Drill techniques

In line drill offers best chance to succeed
In all cases, seeds need a close contact with soil / light moisture

JULY
SEPTEMBER
Latest first week of
September

+ 30-50 DAYS

+ 40-80 DAYS

When plants reaches green pods formation in the lower part

Incorporation technique

Same day thinly chopped and incorporated with Rotavator - Power harrow (10 cm)
Discs Harrow (up to 15 cm)

Warning do not drill immediately after incorporation your seeds may not germinate - Let it cool off for 10 days