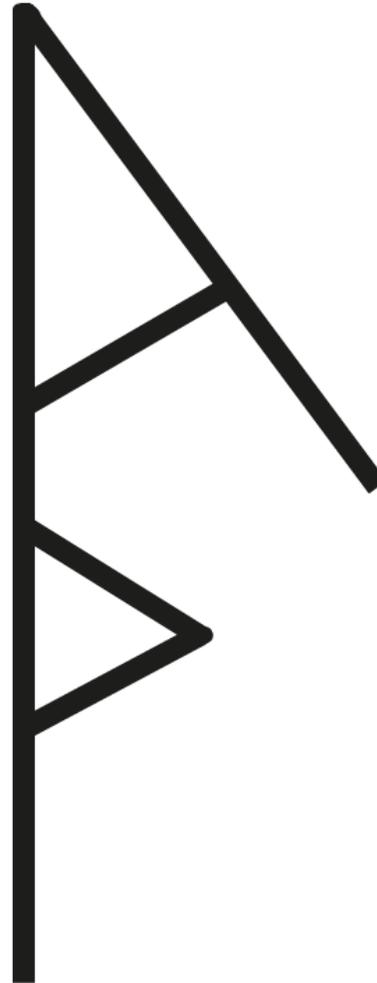


Minimizing the risk of diseases and early detection when it happens:

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Why do we need to minimize the risk?

- ▶ Fungicides, pesticides and herbicides are getting very specialised.
- ▶ Every year different types gets discontinued.
- ▶ We could get a growing problem with restisance.

Godkjente preparater mot sopp sykdommer (februar 2023)

	Gråskimmel (<i>Botrytis</i> spp.)	Furuas knopp og greintørkesopp (<i>Gremmeniella abietina</i>), furuskytte-sopper (<i>Lophodermium</i> spp.)	Filtsopp (<i>Herpotrichia</i> spp.)	Rot- og rothalsrøtter, visnesyke (Oomycota: <i>Phytophthora</i> , <i>Pythium</i> , <i>Peronospora</i>)	Svartskurv (<i>Rhizoctonia solani</i>)	Lokkrust (<i>Thekopsora arveplata</i>)
Nordox 75 WG	X	X	X			X
Teldor WG 50	X					
Switch 62,5 WG	X					
Serenade ASO	X					
Luna Privilege	X					
Delaro SC 325		X				
Rizolex 50 FW					X	
Aliette WG 80				X		
Topas 100 EC						X
Delan 700 WG						X

Andre skadegjørere der det mangler godkjente preparater

Det er flere viktige skadegjørere som kan forårsake store skade i planteskoler hvis inokulum er tilgjengelig og miljøforhold er gunstige for patogenet. Denne listen har blitt lengere nå etter at Topsin har mistet godkjenning.

- Granas snøskyttesopp (*Lophophacium hyperboreum*)
- Furuas snøskyttesopp (*Phacidium infestans*)
- Furuas knekkesopp (*Melampsora pinitorqua*)
- *Phomopsis*-skade (*Phomopsis* spp.)
- Fallsjuka (*Cylindrocarpum* spp., *Fusarium* spp., *Rhizoctonia* spp.)
- Grankingel (*Rhizoctonia* spp.)

How do we minimize the risk?

▶ **Internal**

- ▶ Try to keep the weeds away from the field.
- ▶ Desinfecting the pots before use
- ▶ Washing the greenhouses before spring
- ▶ Grow our plants above ground

▶ **External**

- ▶ We don't take plant from other nurseries in our existing line of production.
- ▶ We check all pallets we receive for mark of-heat-treatment.

Detecting and handling of an potential disease

- ▶ What we basically are looking for in detecting a problem is change, how is the color, smell and taste of the plants.
- ▶ Different problems for different species.
- ▶ Accept that one plant can die as long as we make sure that it doesn't spread
- ▶ Daily routines for checking the fields and greenhouses
- ▶ Putting other work aside to fix the problem when it happens.
- ▶ Learning what the biggest risks are in our nursery and how to act upon them

A close-up photograph of a man with a beard and mustache, smiling broadly and looking slightly to the side. He is peeking through a narrow vertical gap between wooden slats. The background is a soft, out-of-focus green. The image has a semi-transparent dark green overlay on the right side.

The smelling test

For the trained forest nursery nose

We are lucky (I think)

- ▶ Having a forest nursery in a coastal climate good for plant health!
- ▶ More wind = less attack by fungi.
- ▶ We have the last couple of years tried to do some batches with less spraying.

The background features abstract, overlapping geometric shapes in various shades of green, ranging from light lime to dark forest green. These shapes are primarily located on the left and right sides of the frame, leaving a large white central area. The shapes are layered, creating a sense of depth and movement.

Thank you