

Svenska Golfförbundet

WP 6: Variety selection, seed priming and testing of sowing machines for faster recovery of winter-killed greens

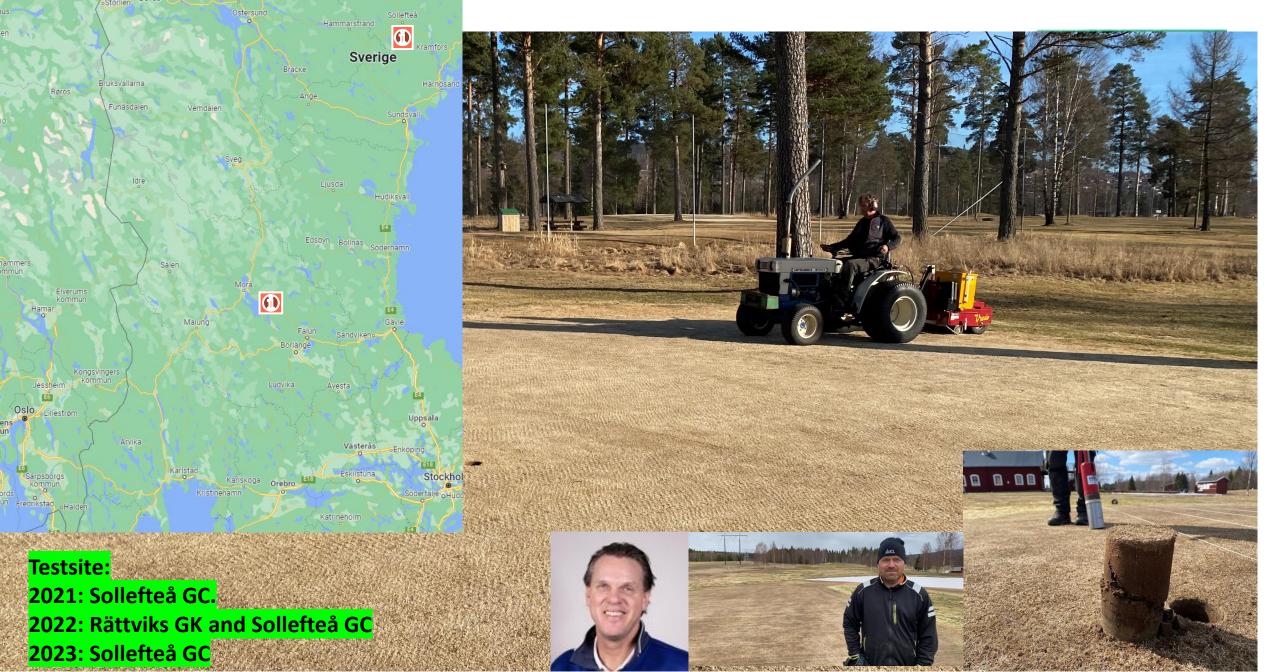
Summary and results 2021-2023

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Gardermoen 3 november 2023







Object and goal

- See the difference in the emergence (germination) of new grass plants on 4 different CB varieties (Independence, Pure Select and Luminary) (same seedbag every year)
- "Evaluate" the difference when "re-establishing" a naturally dead green.
- Can seed priming (GA3) speed up the germination rate?

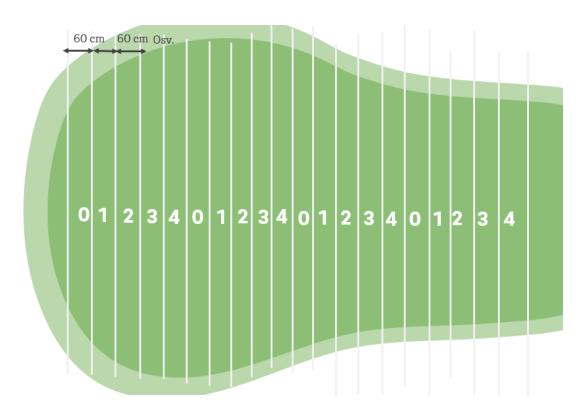






Description of the project

Map of the green. Same green and plot every year! 4 repetitions.



		Not.
Plot 0	Conrol, No seed	
Plot 1	Pure S	"Fast"
Plot 2	Luminary	"Medium"
Plot 3	Independence without priming	g "Late"
Plot 4	Indepenendence with Primning	g "Late"

Amount of seed: 0,3 kg/100m2 x 2 directions.

Before the project started

- Verticutting in two directions to remove dead grass.
- Solid tining with Procore down to 10 cm.
- The seed rate was 0,3 kg/100m² in two directions (back and forth). totalt 0,6 kg seed.
- Seed priming was a big process that began 48 hour before seeding (gibberlic acid, GA3).

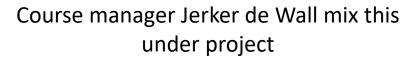


Priming of bentgrass seeds



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Seeding and evaluation dates

- 2021: 7 May (24 May & 2 June)
- 2022: 27 april (21 May & 1 July)
- 2023: 9 May (10 Juni & 27 June)

• Two readings per year/green

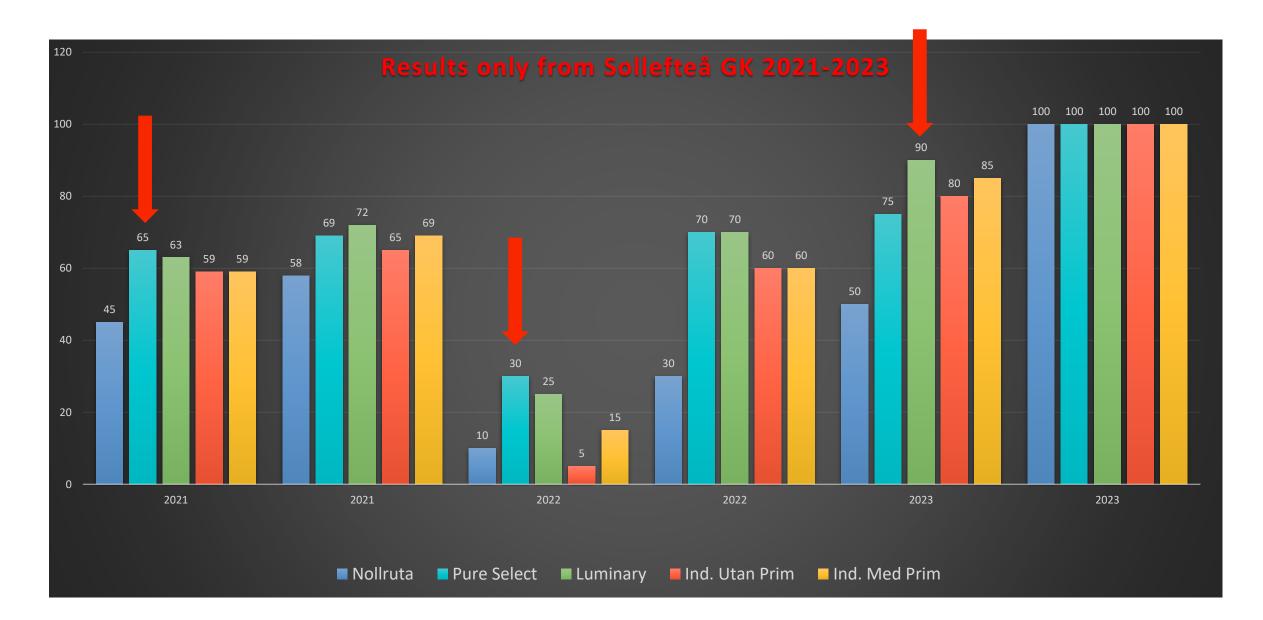


Spring weather conditions over the years

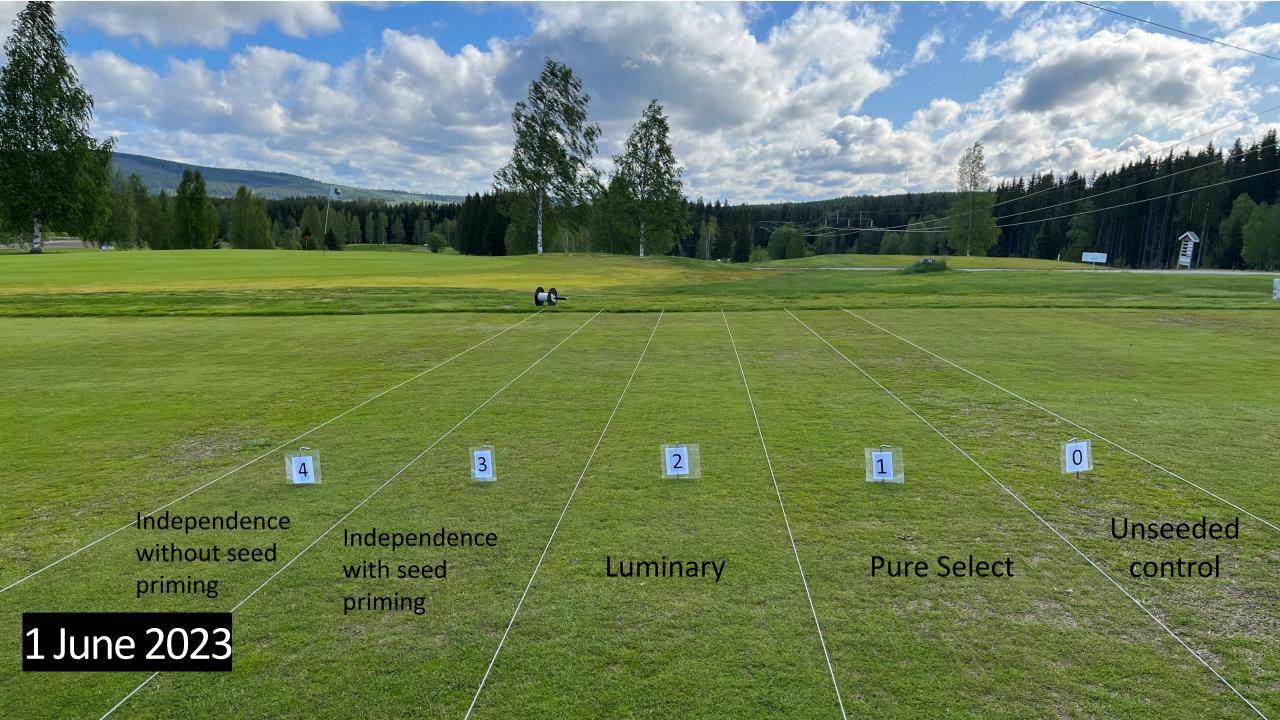
- The spring temperature affects how quickly the seed will germinate......
- Difficult to compare the years.
- 2021: Warm spring
- 2022: Very dry and cold spring
- 2023: Warm spring



Grass coverage after seeding (%)









Summary 2021-2023

- To summarize, there was generally quite good establishment on all bentgrass varieties. But......
- Pure Select was the fastest variety......(about 10-14 days)
- Luminary was close but not as fast as Pure Select (about 16 days)
- Independence without priming was slow (about 22 days)
- Independece with priming was faster (about 19 days)
- The control plot was not good in any year



Some observations from the project

- The effect of seed priming with GA 3
 (gibberlic acid) turned out to be small with
 and barely measurable.
- Both Luminary and Independence were better than Pure Select to spread out laterally.
- Something that was observed in Sollefteå during the autumn was how large percentage creeping bent there can be after two growing seasons, the green now has now about 75% bentgrass



Picture from 21 sep 2023



Take home message!

• It is important to "reseed" golfgreens after winter injuries with new seeds!

- Make sure the grass seed have good soil contact.
- Use a good seed machine (I prefer "slitting" machine)



















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