

Variety research of foddergrasses in the Netherlands

EU-VCU expert meeting, Denmark

May 2024, Jan Rinze van der Schoot



Grassland in the Netherlands

(Source: CBS 2023)

- Area of grassland: 970.000 ha (\pm 50% of total)
 - Permanent grassland (>5 years): 75%
 - In rotation (less than 5 years): 25%
- About 2/3 of area is (partly) grazed
- Renewal grassland in the Netherlands (estimate)
 - Overseeding: \pm 5-10%
 - Resowing: \pm 35-40%
 - In rotation: \pm 45-50%

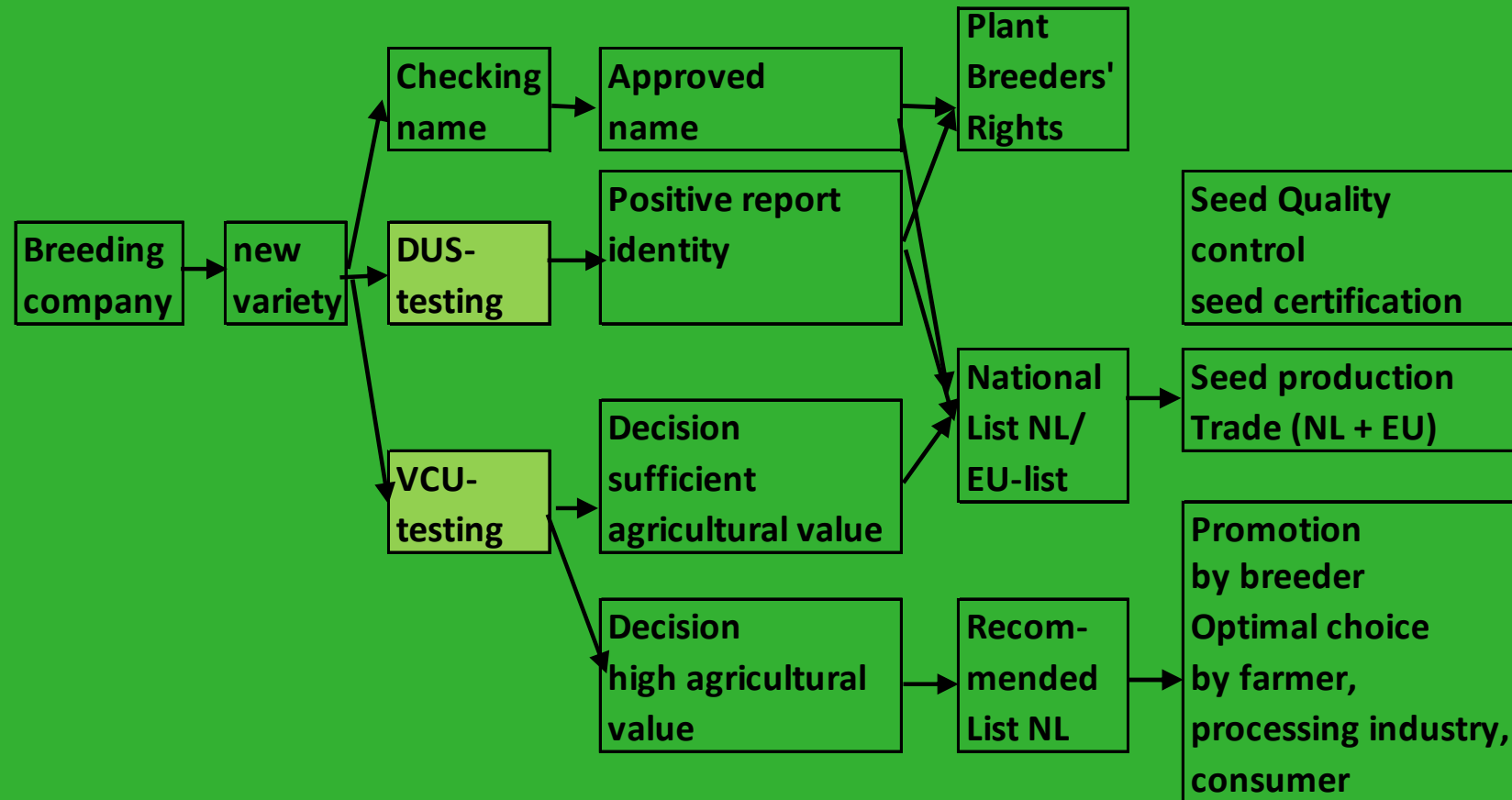


Organisation variety research

- VCU-research for National List and VCU-research for the Recommended List is fully integrated (same trials)
- Research is done by Wageningen UR Livestock Research
- Controlling trials and reliability of results. Delegated task of Board for Plant Varieties to NAKtuinbouw.
- Research is fully paid by breeders
- Recommended List organised with Plantum
- Each crop has 'Crop working committees VCU-testing'
 - Proposals for adaptations in VCU-Protocols
 - Tendering VCU-research



DUS- and VCU-testing



Species tested in VCU

- Lolium perenne; perennial ryegrass
- Other species (when > 4 varieties are applied)
 - Phleum pratense: timothy (2011)
 - Trifolium repens; white clover (2016)
 - Festulolium (2020)
 - Medicago sativa; lucerne (2022)
 - Trifolium pratense; red clover (2023)
 - Hybrid ryegrass (2023)

- Breeders/applicants can do own trials for National Listing



Trials

- Grazing trials
 - Perennial ryegrass
- Cutting trials
 - All species
- Competition trials (grazing trials)
 - timothy, meadow fescue, white clover



Testing scheme Perennial ryegrass

	year 1	year 2	year 3	year 4	year 5
<i>Grazing trials</i>					
Loc. 1 sand	sowing	+	+	+	
Loc. 2 sand		sowing	+	+	+
<i>Cutting trials</i>					
Loc. 3 sand	sowing	+	+	+	
Loc. 4 clay		sowing	+	+	+



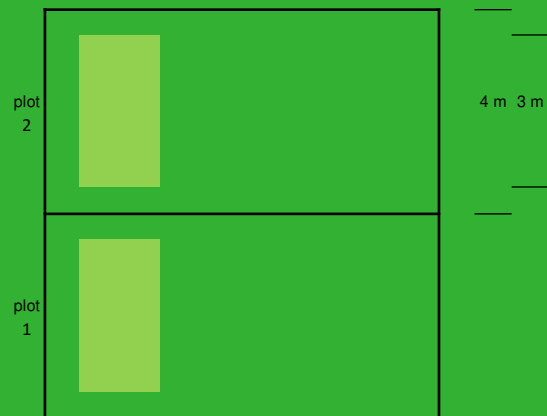
Trial sites



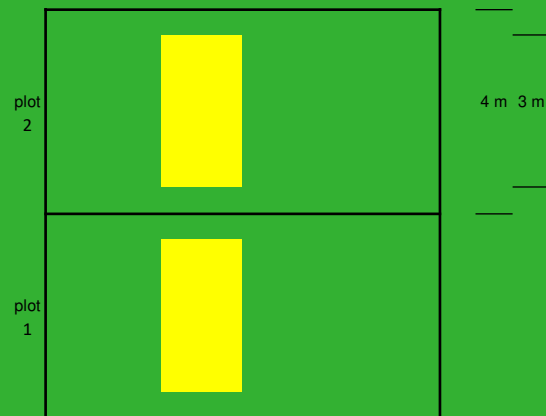
Cutting trial



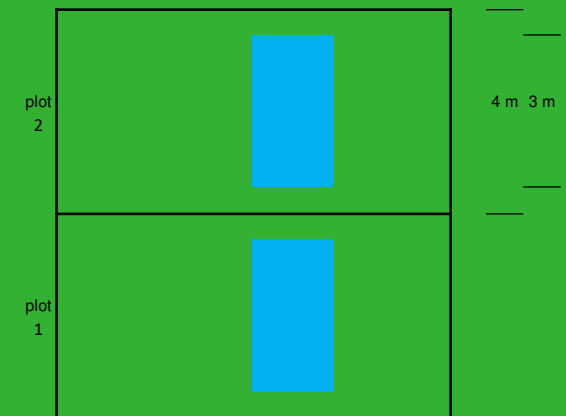
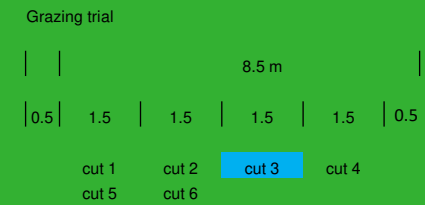
Set up grazing trials



5-7 cuts per year
r 5-7 cuts per year
4-5 m² 4-5 m²



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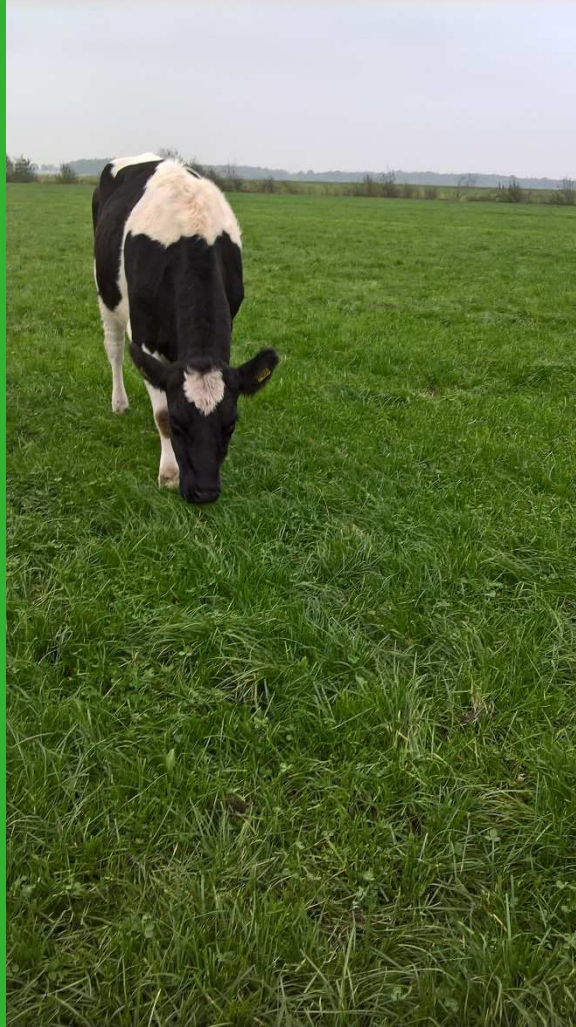
Grazing trial



Grazing trial



Competition trial



Characters

- Yield (dry matter yield)
- No feeding value (digestibility, protein or sugar) at this moment
- Winter hardiness
- Resistance to diseases
- Persistency
- Capacity to compete in mixtures



Persistency



Crown rust



Winter hardiness



Grass clover competition



Addition new varieties Recommended List

- Positive DUS required
- Sufficient VCU
 - Minimum levels for persistency, winter hardiness and resistance crown rust
 - New varieties must be better than average of listed varieties (index: persistency, rust and yield)
- Limited list (what means with addition of new better varieties, older worse varieties are deleted)



End

Thank you for your
attention



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