

# Patent on maize

Online talk, 14<sup>th</sup> of October 2024



**Nordic Maize breeding**  
Breeding for diversity in agriculture

Nordic Maize breeding started in 2002

Silage maize in the North of the Netherlands was harvested in November:  
*That ought to be earlier!*

In 2008 our first variety

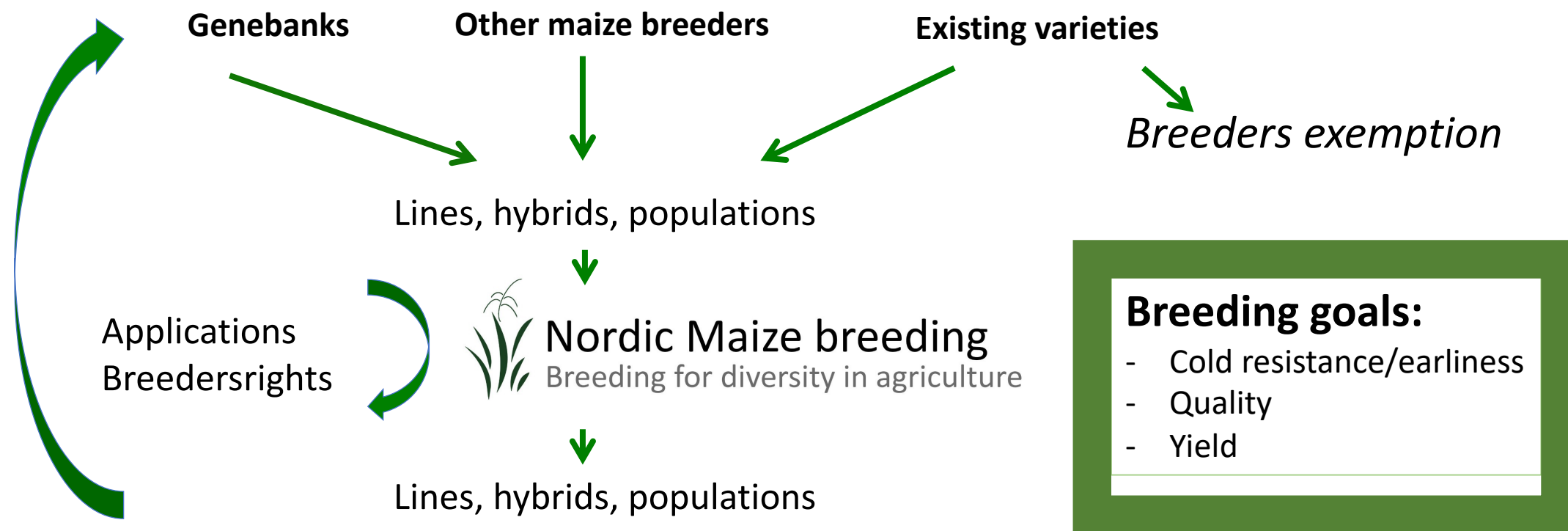
In 2011 our first ultra-early maize variety (growing season 18 weeks)

In 2015 we lost our first variety on GMO contamination (22 ton, Chili)



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## How did we started when the freedom of breeding still existed?



The only 100% Dutch maize breeding company

We developed the earliest maize varieties

Farmers can earn sustainability points with only our varieties (harvest before 1st September)

We produce maize seed in the Netherlands

We have about one third of the Dutch organic market

*Regional breeding works!*



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## RASSENULLETIN SNIJMAIS ULTRA VROEG 2024

### Groeiseizoen 18 weken

RASSENONDERZOEK SNIJMAIS ULTRA VROEG <sup>1)</sup>																	
Gemiddelde resultaten over 2019 t/m 2023																	
Ras <sup>2)</sup>	Stengelrot resistentie	Stevigheid <sup>3)</sup>	Zomerlegering	snelheid grondbedekking	Builenbrand resistentie	Plantlengte	Kolfhoogte	Drogestofgehalte in % <sup>4)</sup>	Drogestofgehalte relatief	Zetmeelgehalte	Suikergehalte	Celwandgehalte	Celwand- verteerbaarheid	VEM/kgds	Drogestof- opbrengst	VEM-opbrengst	Aantal jaren in onderzoek
Ultra vroeg																	
Flynt	7.5	6.5	8	7	8.5	100	100	35.5	100	100	100	100	100	100	100	100	5
Ultra vroeg / Zeer vroeg																	
NMB18R52	6	7	6.5	6.5	8	102	100	34.1	96	101	100	99	97	99	105	104	3
Pyroxenia	7	5.5	5.5	8	7	110	103	30.1	85	95	115	101	97	98	104	103	3
Skandinav	8.5	8	8	8	8	117	121	29.6	83	88	102	110	100	97	112	109	3
1 jaar onderzocht																	
Ultra vroeg																	
NMB1861	7.5	7	6	7	*	105	99	37.7	106	104	93	97	99	101	108	109	1
100 = Flynt resp..in cm (2x); %; gr/kgds(3x); %; VEM/ kgds; ton/ha; ton kVEM/ha						257	87	35.5		353	61	385	52.7	987	14.8	14.6	

1) Resultaten zijn niet te vergelijken met Rassenbulletin Snijmais ultra vroeg (20wkn), vanwege ander oogstmoment en standaardrassen



Short season varieties enable croprotations:

April	May	June	July	August	September	October
	Maize season					
	ultra-early maize				wintercereal/winterhardy peas	
grass/winterhardy peas		ultra-early maize				
	ultra-early maize				winterrapeseed	
spinach/lettuce		ultra-early maize				
	ultra-early maize				green manure	
early potatoes/wintercereal/bulbs			ultra-early maize			



Winter cereal-winterpea



winterrapeseed



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## Early varieties enable regional seedproduction



Seedproduction with clovermixture  
Harvested before 1st of October



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## **Indepent breeding companies are:**

- Capable to work 'out of the box'.
- Out of need of extreme efficiëncy
- Capable to develop 'not money driven' innovations
- Motivated to serve the sector instead of serving investors and shareholders
- Capable of serving regional markets





## **Indepent breeding companies strongly depend on**

- Free accessible genetic sources
- The use of the Breeders Exemption





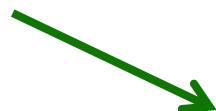
Patents 

NGTs and patents 

 Genenbank

**Existing varieties**

**Other breeders**



Lines, hybrids, populations



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Lines, hybrids, populations

 *Breeders exemption*

Application  
Breeders right

When someone wants to start breeding,  
patentholders have to be contacted first



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We do not know if our material contains patented genes  
(the detection of the patented genes is also patented)

We are facing an uncontrollable risk of pollution with patented genes of our material  
(Our biggest risk is with the contractor who plants maize for farmers)

Should we, as solely a breeding and production company without a legal department,  
enter into discussions with patent holders?

Will patents on seed contribute to food security?

We, in Europe, are now in the same unprotected situation as many  
small scale breeders / farmers of the global south



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Thank you for your attention



Any questions?

*#DNAisnatureowned*

*#breedingisahumanright*



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