

THE NOBEL PEACE PRIZE 2020



World Food Programme (WFP)

"for its efforts to combat hunger, for its contribution to bettering conditions for peace in conflict-affected areas and for acting as a driving force in efforts to prevent the use of hunger as a weapon of war and conflict"

THE NORWEGIAN NOBEL COMMITTEE



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LICENSE TO PRODUCE?!





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THE ERA OF TARGETED BREEDING ~ GENETIC AND GENOMIC CONTROL

CAYMAN

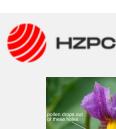
• DNA Marker = 1 gene for 1 trait

• DNA Marker = few genes for 1 trait

INNOVATOR / AILLISON

 Build predictive algorithms on complex traits = many genes are needed for one trait













20 dominant traits 1 mio true seeds

Resistances for PCN, Virus, Phytophthora etc. and other traits. Enrichment every new generation – gene stacking!

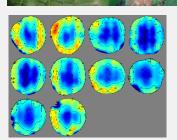
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VARIETY DEVELOPMENT: TIME! TARGETED!

8-10 years





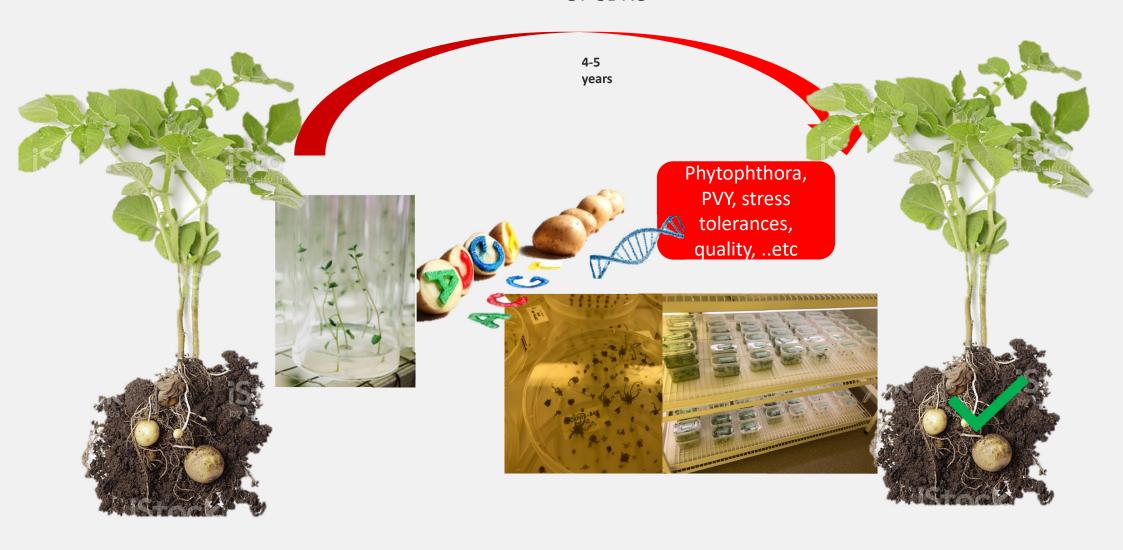


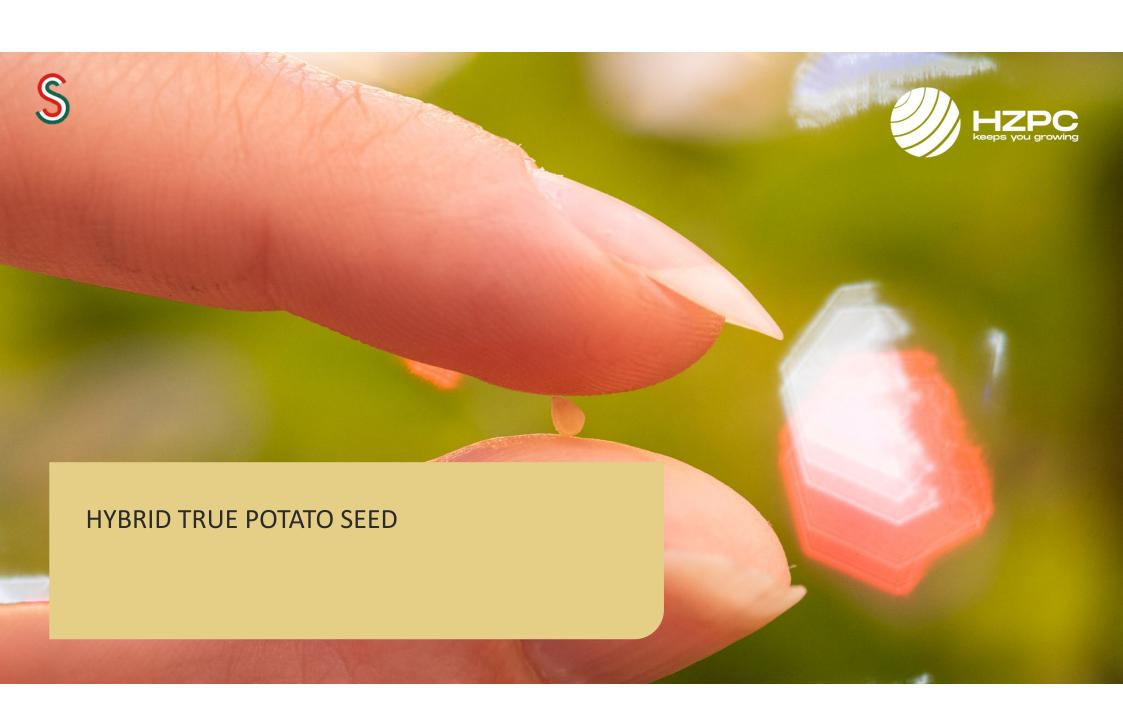
Yield, resistances phyto/virus/scab/...confirm markers. Abiotic stress tolerances, low risk & cost storage etc.



VARIETY IMPROVEMENT NGT (CRISPR/CAS), EU STATES NGT = SDN1, SDN2 AND CISGENESIS OF SDN3













All of the true botanical seeds are (almost) identical and make the variety

NON GMO classical breeding technologies

Qryhdeuhhglqj#Mhfkqrorjlhv# fdq#rqwulexwh#q#erwk# euhhglqj#|vwhpv







One botanical seed produces a plant and tuber, tubers multiply clonal and make the variety



