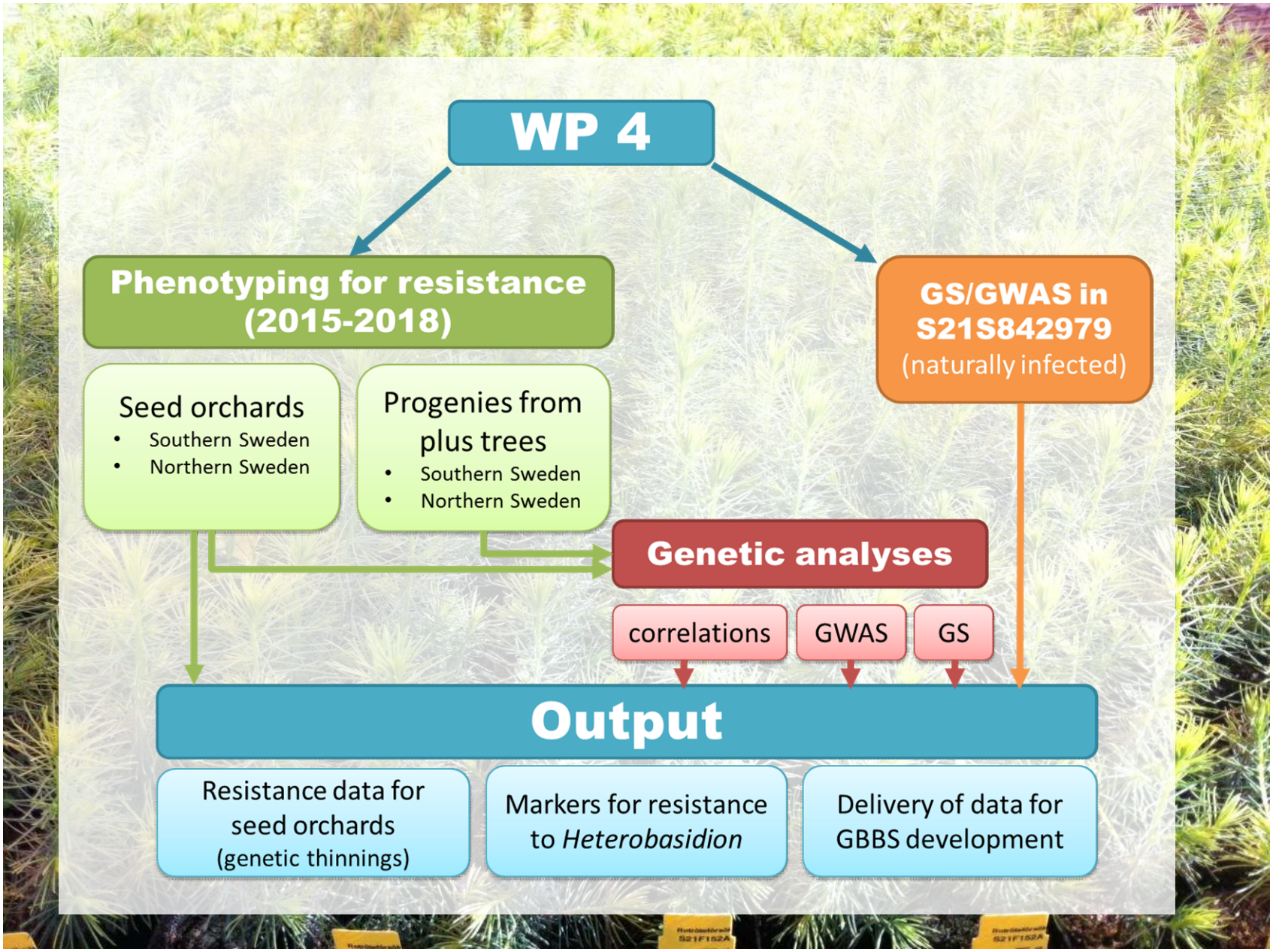
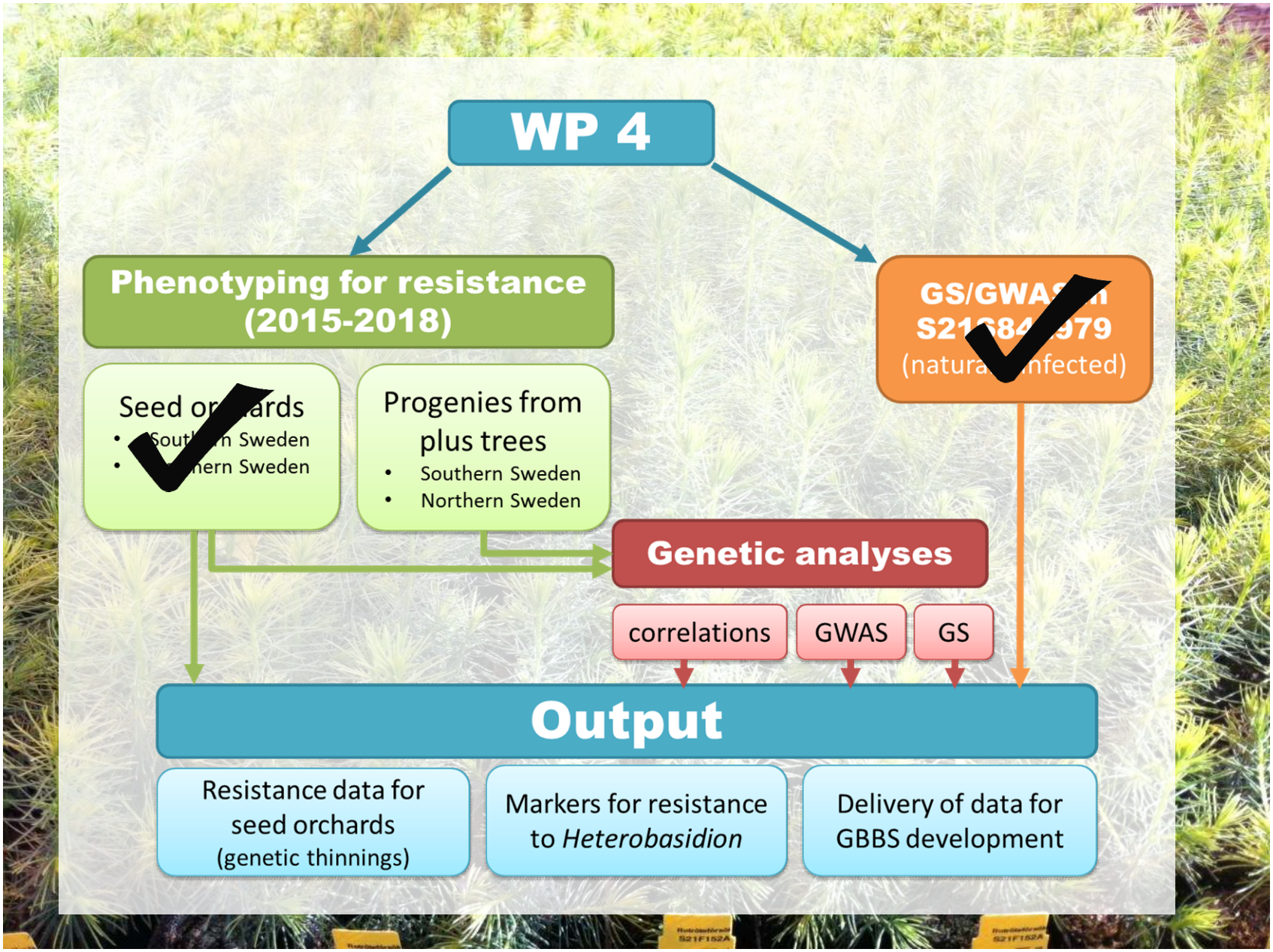

WP 4 -*Heterobasidion* Resistance


WP 4
Phenotyping for resistance (2015-2018)
GS/GWAS in S21S842979 (naturally infected)
Seed orchards
• Southern Sweden
• Northern Sweden
Progenies from plus trees
• Southern Sweden
• Northern Sweden
Genetic analyses
correlations
GWAS
GS
Output
Resistance data for seed orchards (genetic thinnings)
Markers for resistance to *Heterobasidion*
Delivery of data for GBBS development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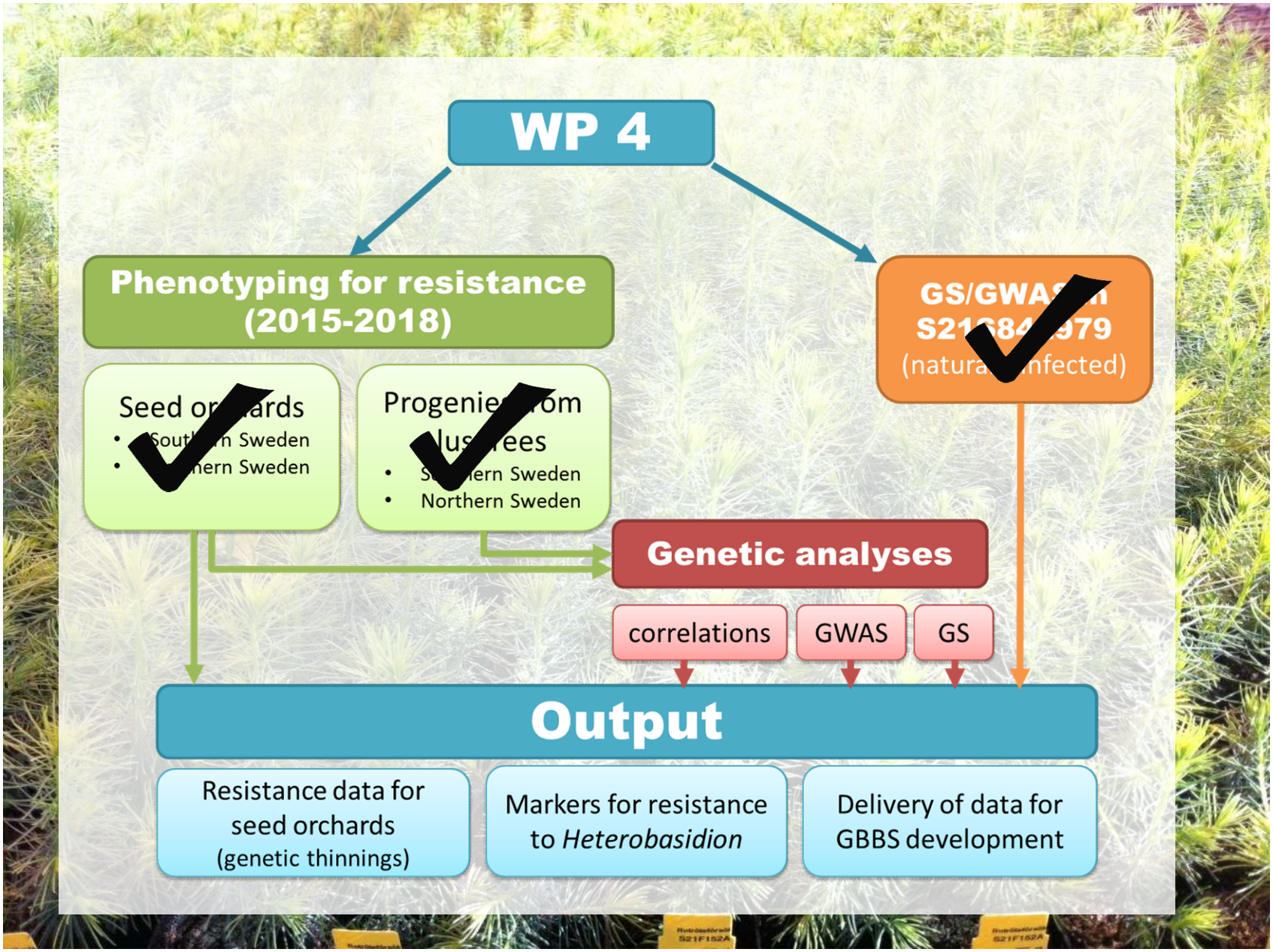
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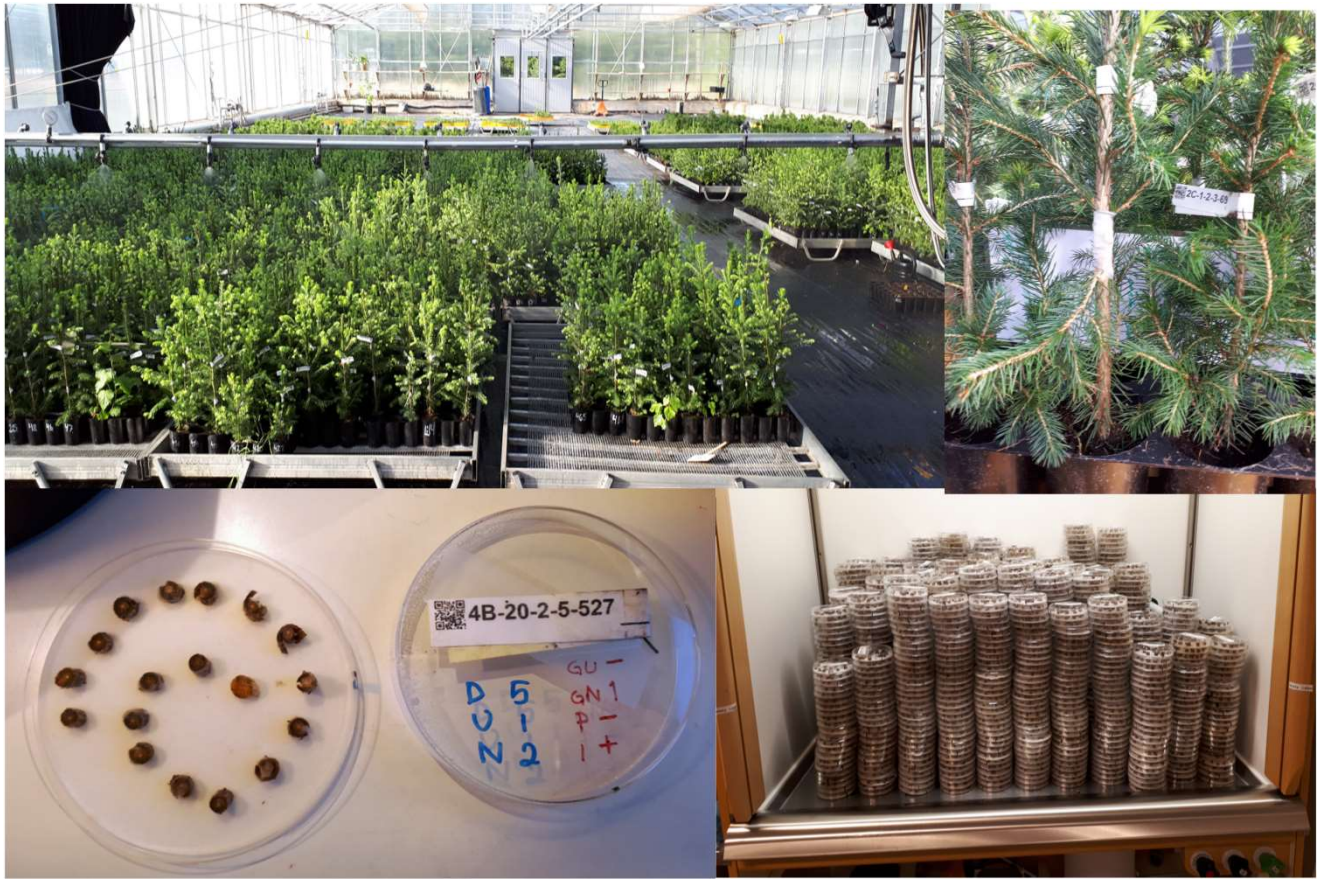
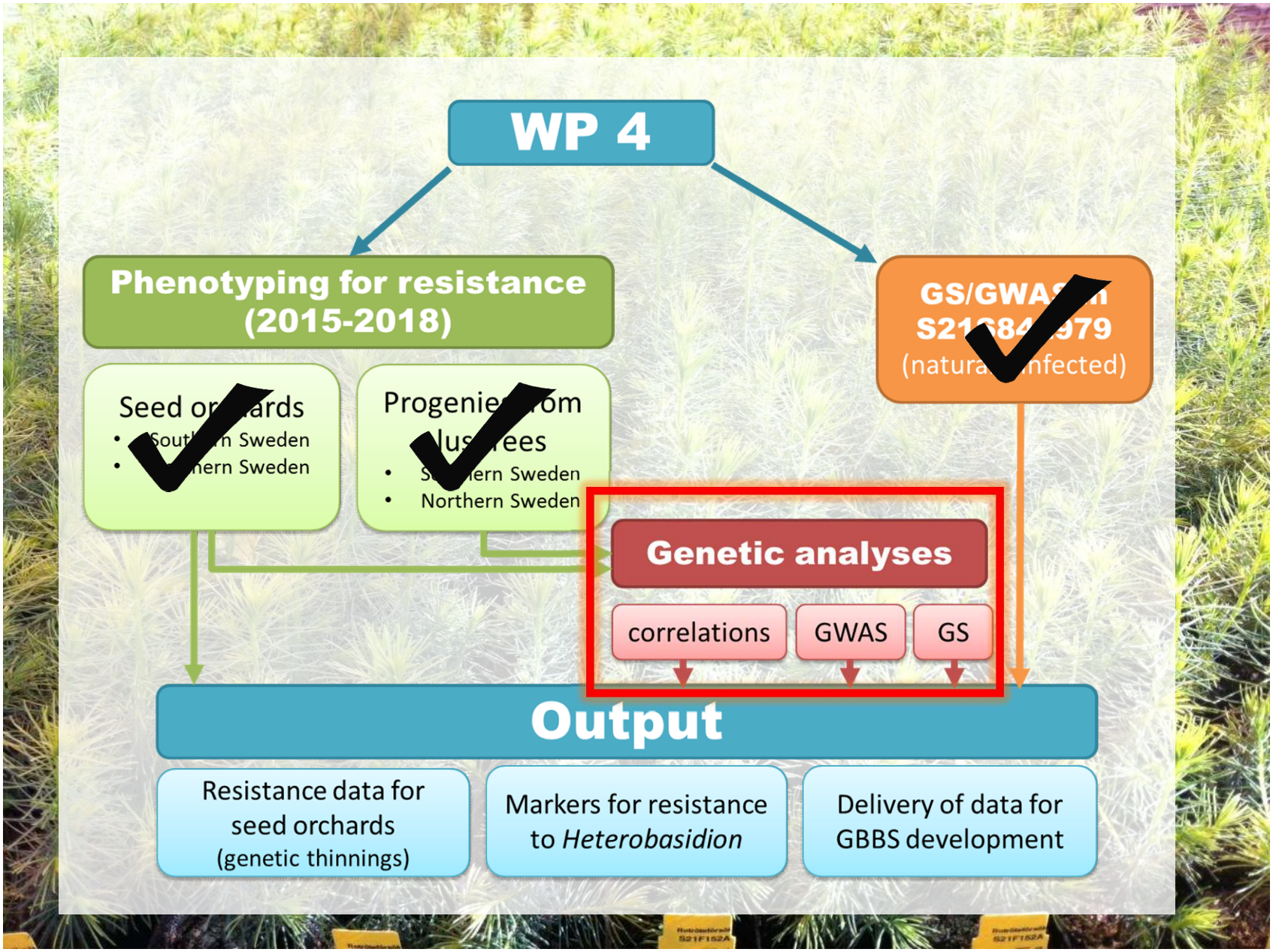

4B-20-2-5-527
GU −
GN 1
P −
I +
DUN 5 1 2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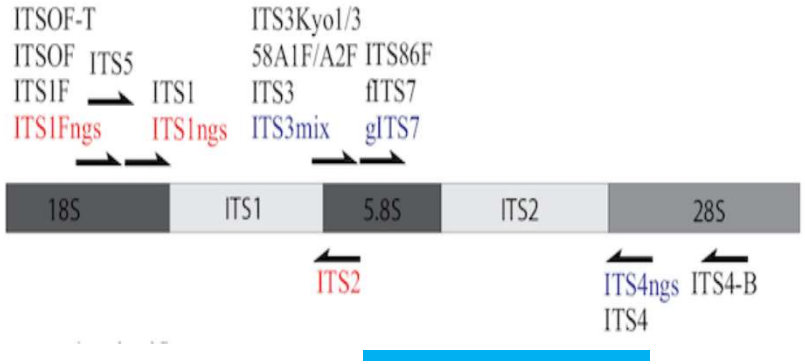
- “Early selection for resistance to *Heterobasidion parviporum* in Norway spruce is not likely to affect growth and wood quality traits in late-age performance.” Chen et al ready for submission

- Analysis of dataset from Northern breeding population

- GWAS of resistance traits

- Association genetics of phyllosphere fungi

Is it possible to associate phyllosphere fungi to genotypic variation in Norway spruce?



DNA from >500 trees (buds)

Amplification of the endo- and epiphytic community with gITS7/ITS4

Sequence on PACBio

Clustering and identification of OTUs (SCATA pipeline)

Frequency of OTUs on different trees

GWAS for phyllosphere fungi