



phylos®

Transitioning to  
seed-based production  
with Phylos  
Production-Ready  
Elite Seeds

*UNLOCKING THE POTENTIAL OF CANNABIS*



# Competitive advantages of seed-based production

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## Reduction and repurposing labor

- Seeds don't require cloning operations
- IPM requirements reduced by starting from clean seeds

## Reduction in non-canopy space

- Seeds don't require pre-veg space (domes in low light)
- Seeds don't require mother rooms

## Targeted breeding

- Pheno hunts are replaced with data-sharing to inform agronomic advances via marker-assisted selection
- Genetic development occurs cycle-by-cycle
- Unicorn searches for trendy flavors becomes boutique



## Sea change opportunity real world analysis\*

Convert 50% of total production to seed-based production, resulting in more high end flower and lower overall cost.

- ↑ FACILITY OPTIMIZATION: Increases flower output by converting mother and overstock rooms to production.
- ↑ IMPROVED PRODUCT: Uniform, high quality flower with ranges near 30% THC, increased vigor and yield and strong aromas.
- ↓ OPERATIONAL EFFICIENCY: Reduces staff allocated to cloning and mother care. Minimal capital expenditure required.
- ↓ LOWERED RISK and MITIGATION COST: All seed rooms start HLVD free. Cross-contaminated rooms restarted in 24-48 hours by sterilizing and replanting with clean seed.



\* Phylos partner calculation of impact of their transition to seed



Increased production by 6%



Decreased labor cost by 26%



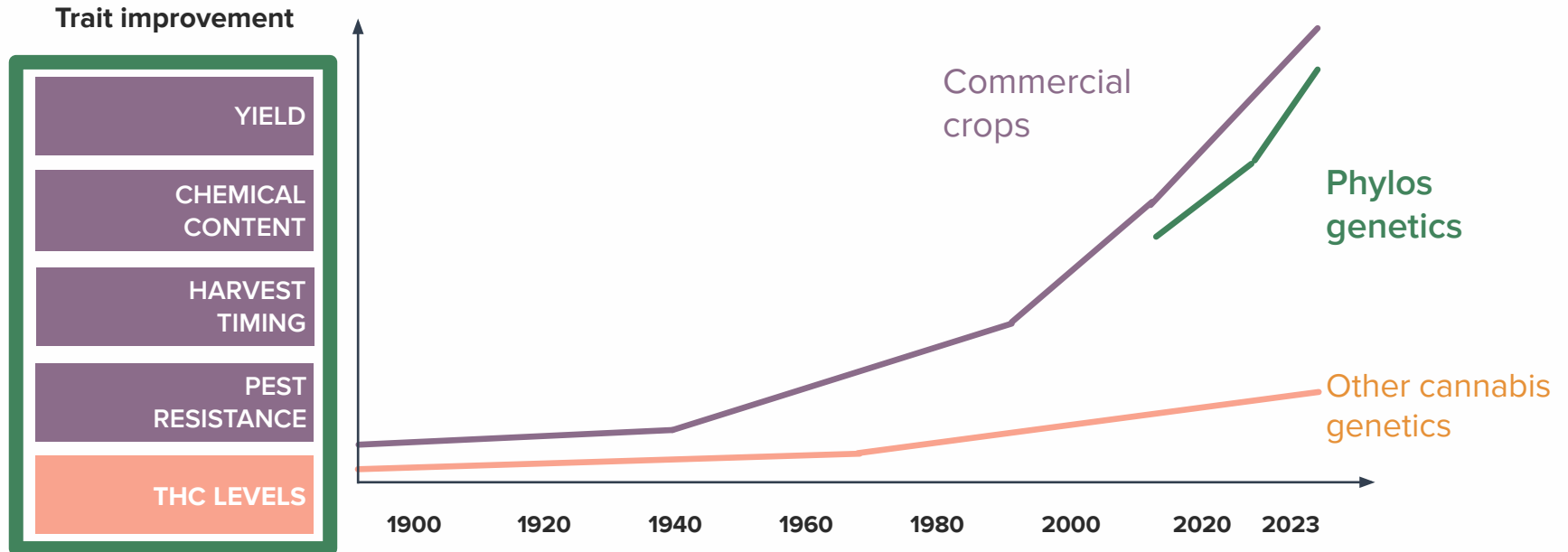
Decreased cost per kg by 18.5%



Increased gross margin by 7%

# F1 seeds produce uniform crops in cannabis just like big ag

Trait improvements in cannabis are focused on THC levels. Phylos combined genomics and modern breeding techniques from the agriculture industry to jump start and accelerate cannabis genetics development.





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