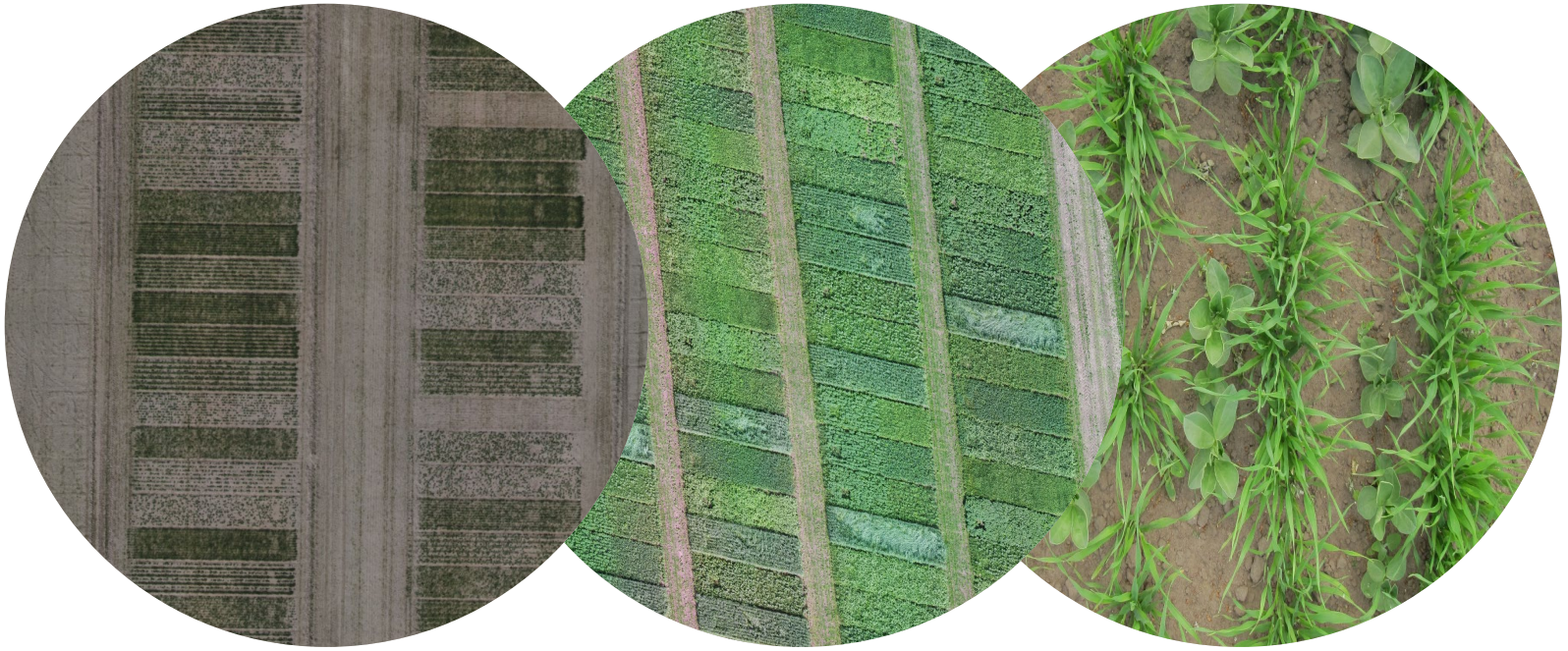
Quantifying the mechanisms of weed suppression in cereal-legume intercrops

23 September 2025

David Kottelenberg



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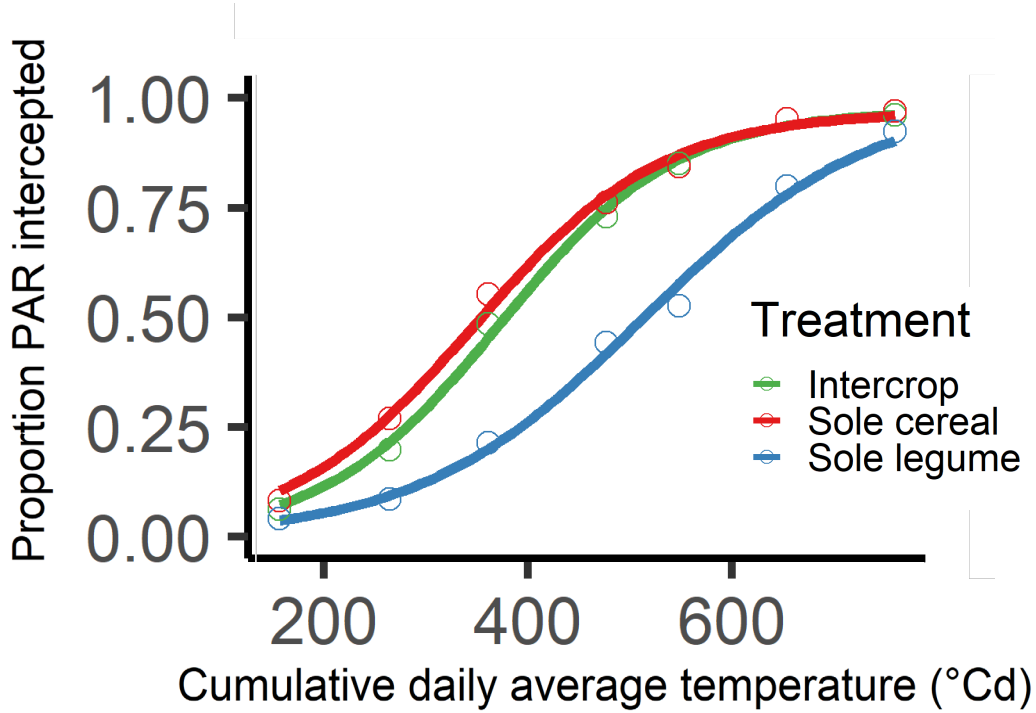
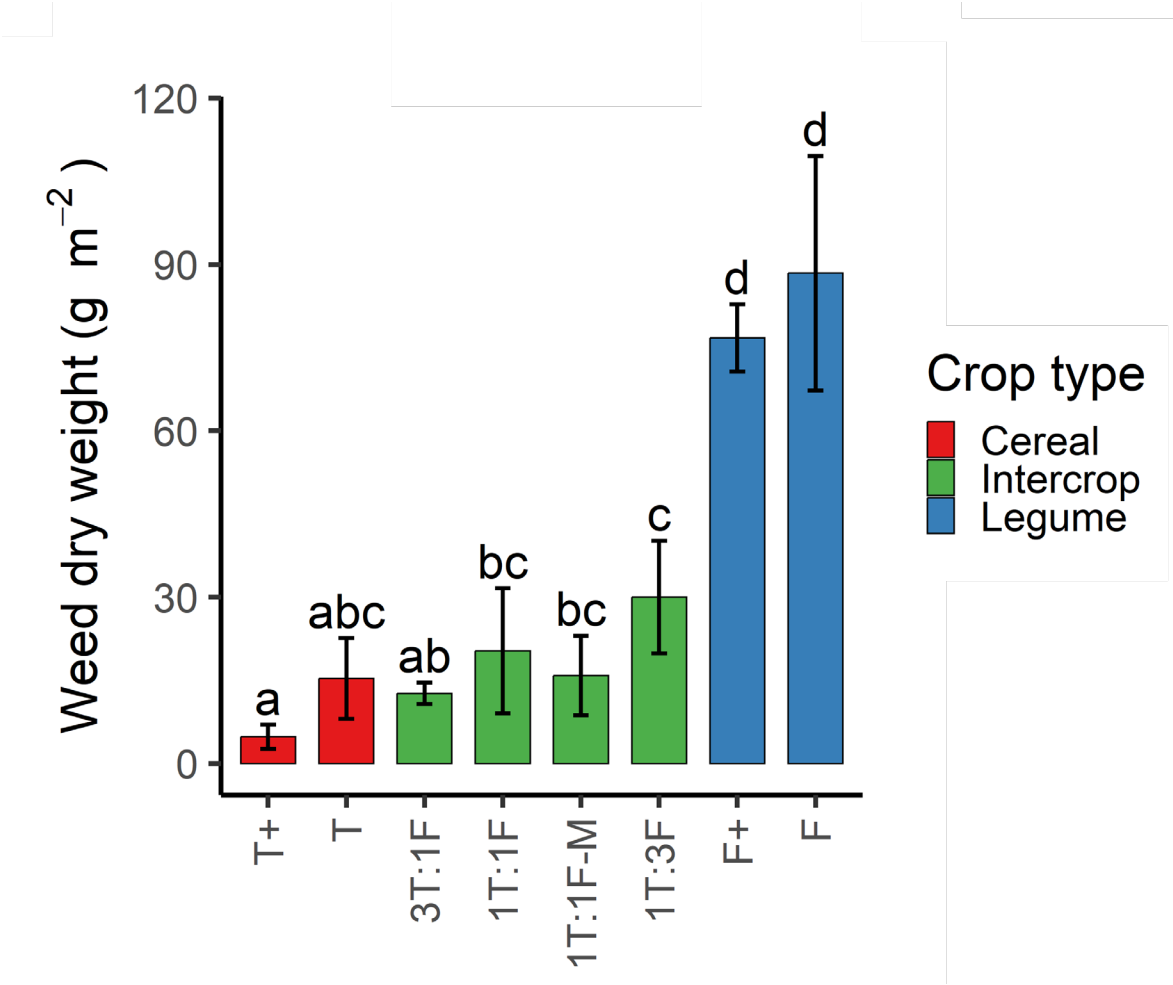
Enhanced weed suppression in intercrops through selection

- Cereals are dominant over legumes in light capture
- 50/50 intercrop light capture very similar to sole crop cereal



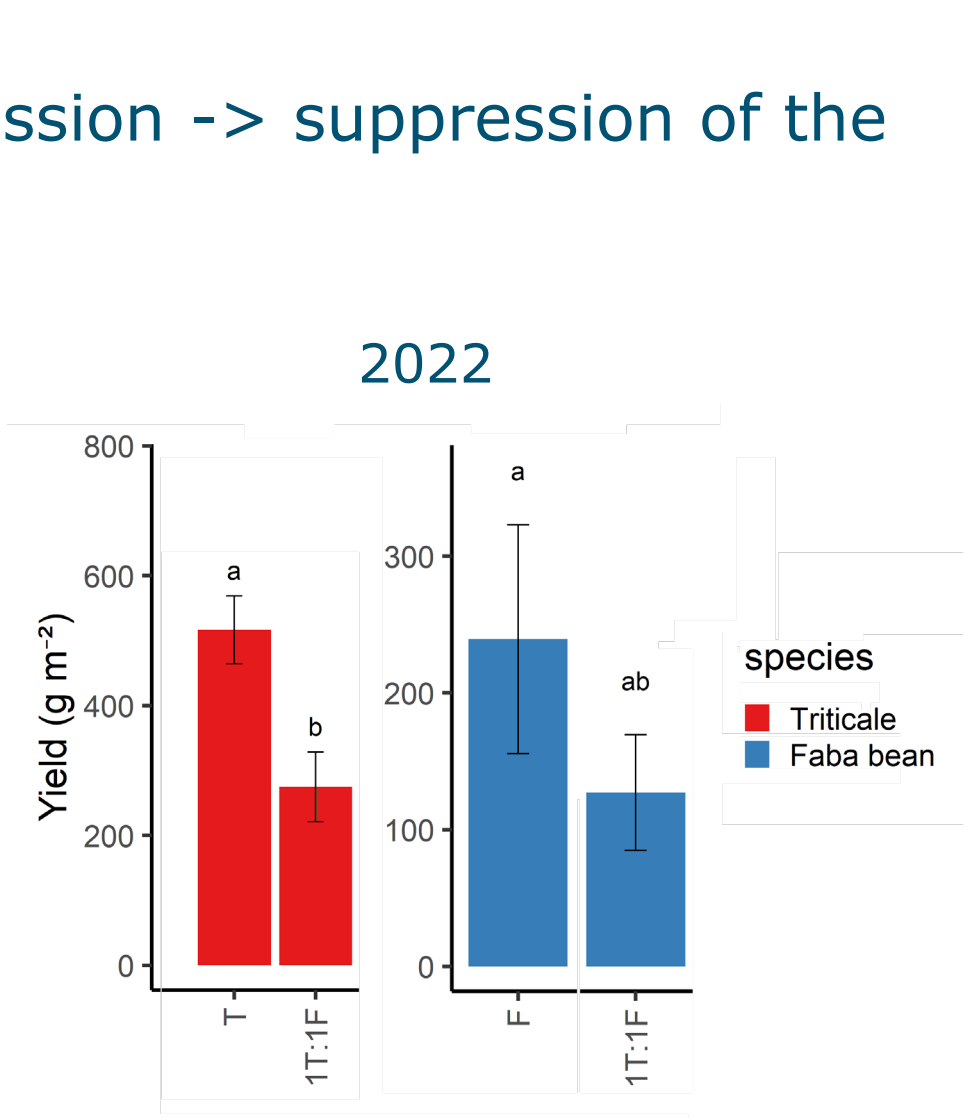
Enhanced weed suppression in intercrops through selection

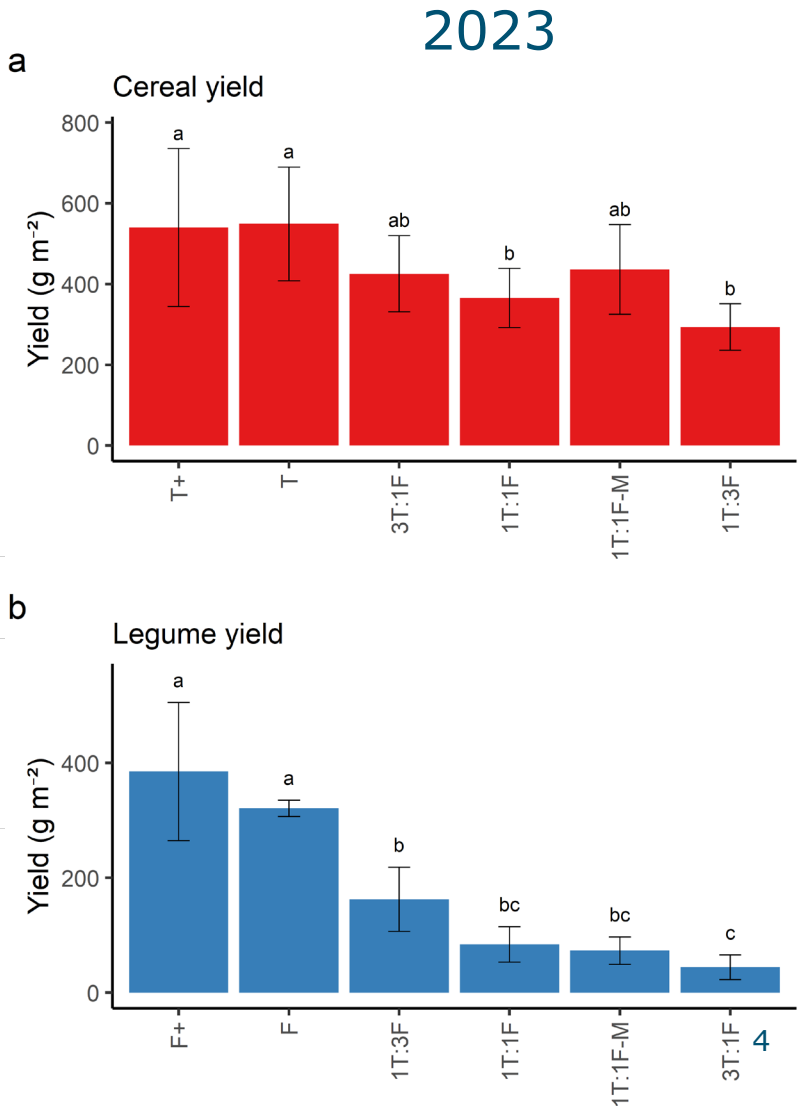
- Weed suppression aligns more with strong competitor
- Even with 25% cereal, weed suppression similar to sole crop



Enhanced weed suppression in intercrops through selection

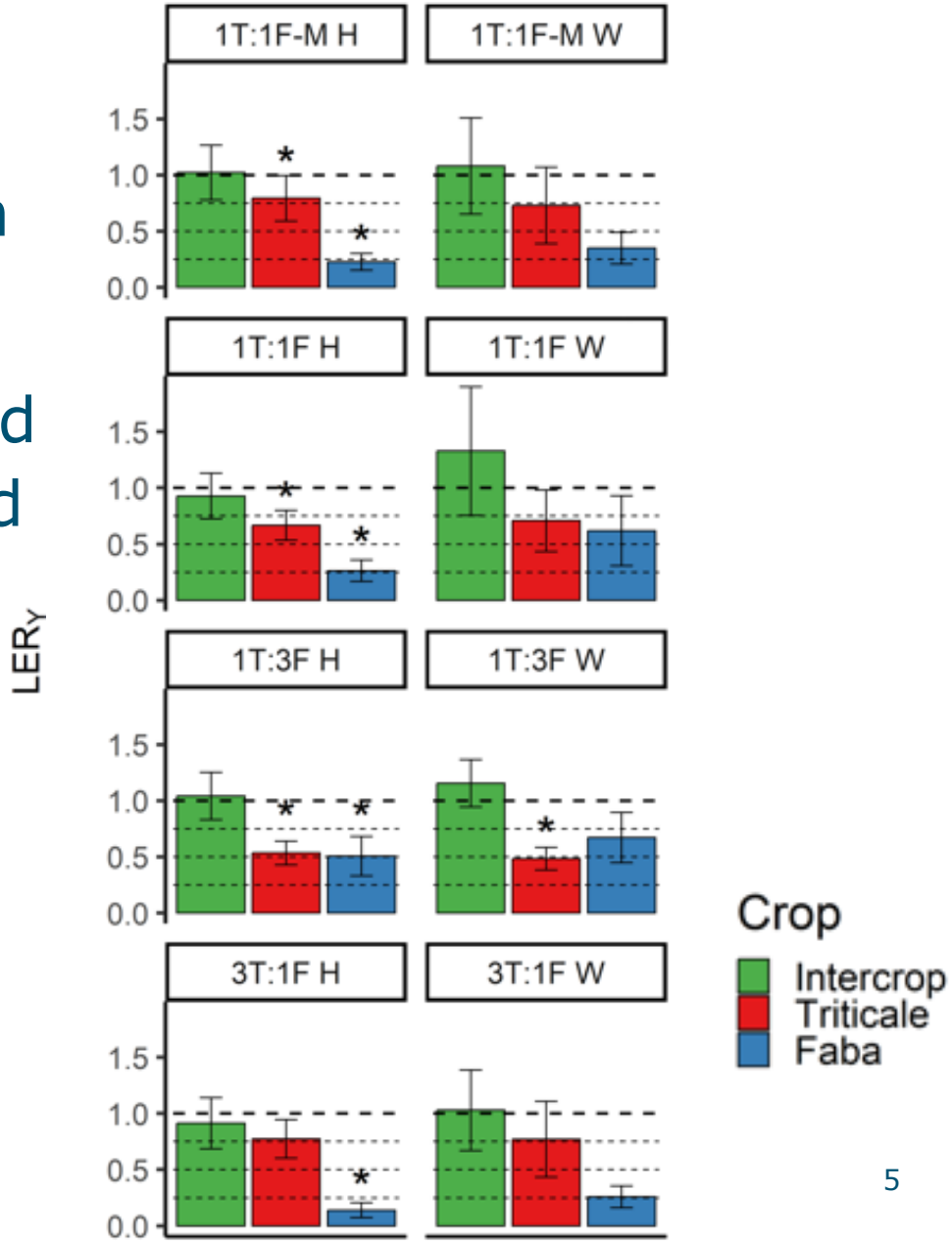
- High weed suppression -> suppression of the weak competitor?





Enhanced weed suppression in intercrops through selection

- More balanced competition through system design
- More balanced competition in weed-infested systems (W) compared to herbicide-treated systems (H)
- **How can we optimally design intercrops for high yield and reduced reliance on herbicides?**
- **What technology is needed to support such systems?**



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