

*How rootstocks are reshaping
apple production*

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How Rootstocks Are Reshaping Apple Production

Presented by:
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**For most South African soils, it would be difficult to improve on M.793
as rootstock for the apple industry.**

Bergh et al. (1978)

What has happened internationally?

Rapid adoption of dwarfing rootstocks

Increasingly smaller tree size

Labour minimisation as key driver

Labour constraints and mechanisation

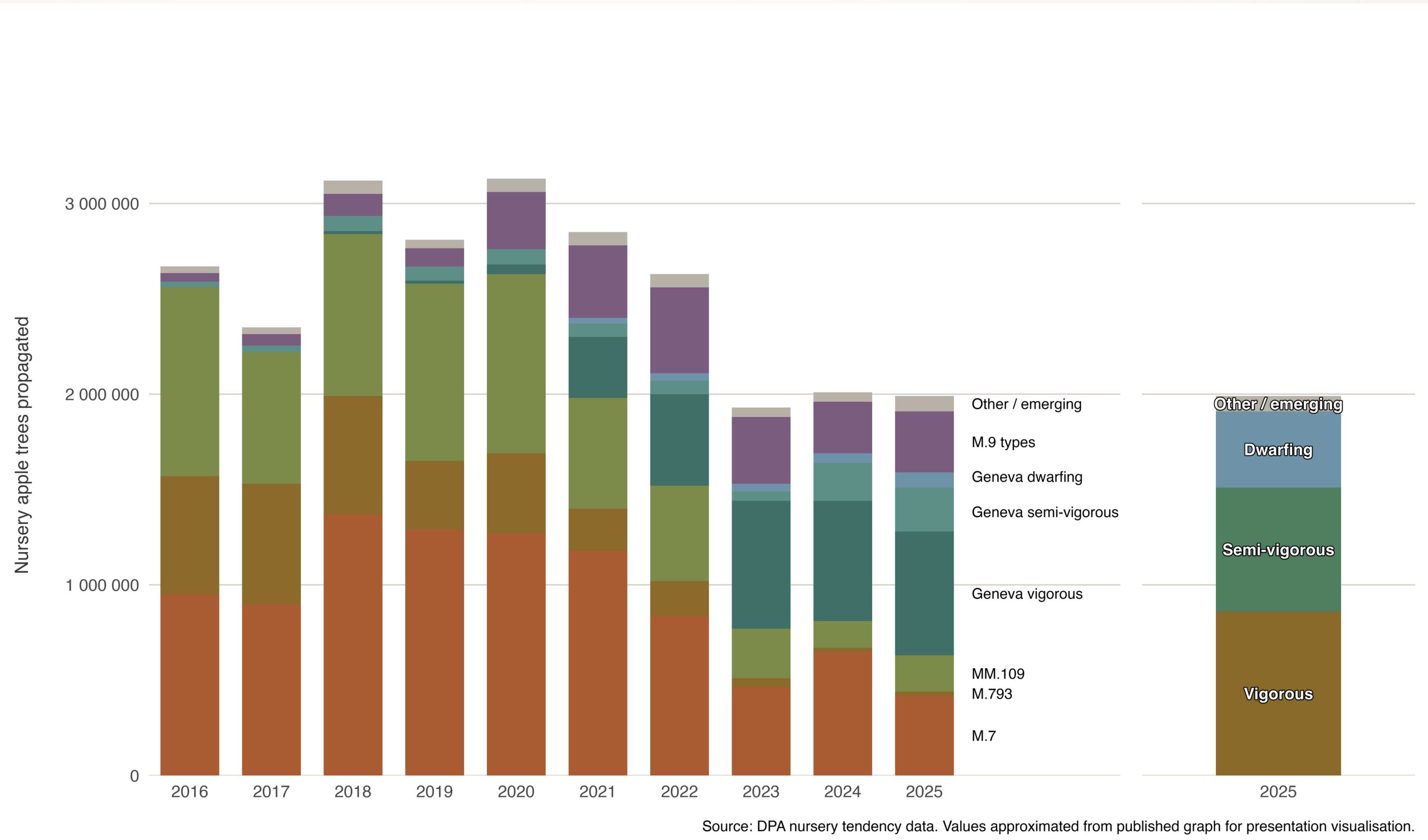
High-density, high-investment systems

Capital and infrastructure intensive

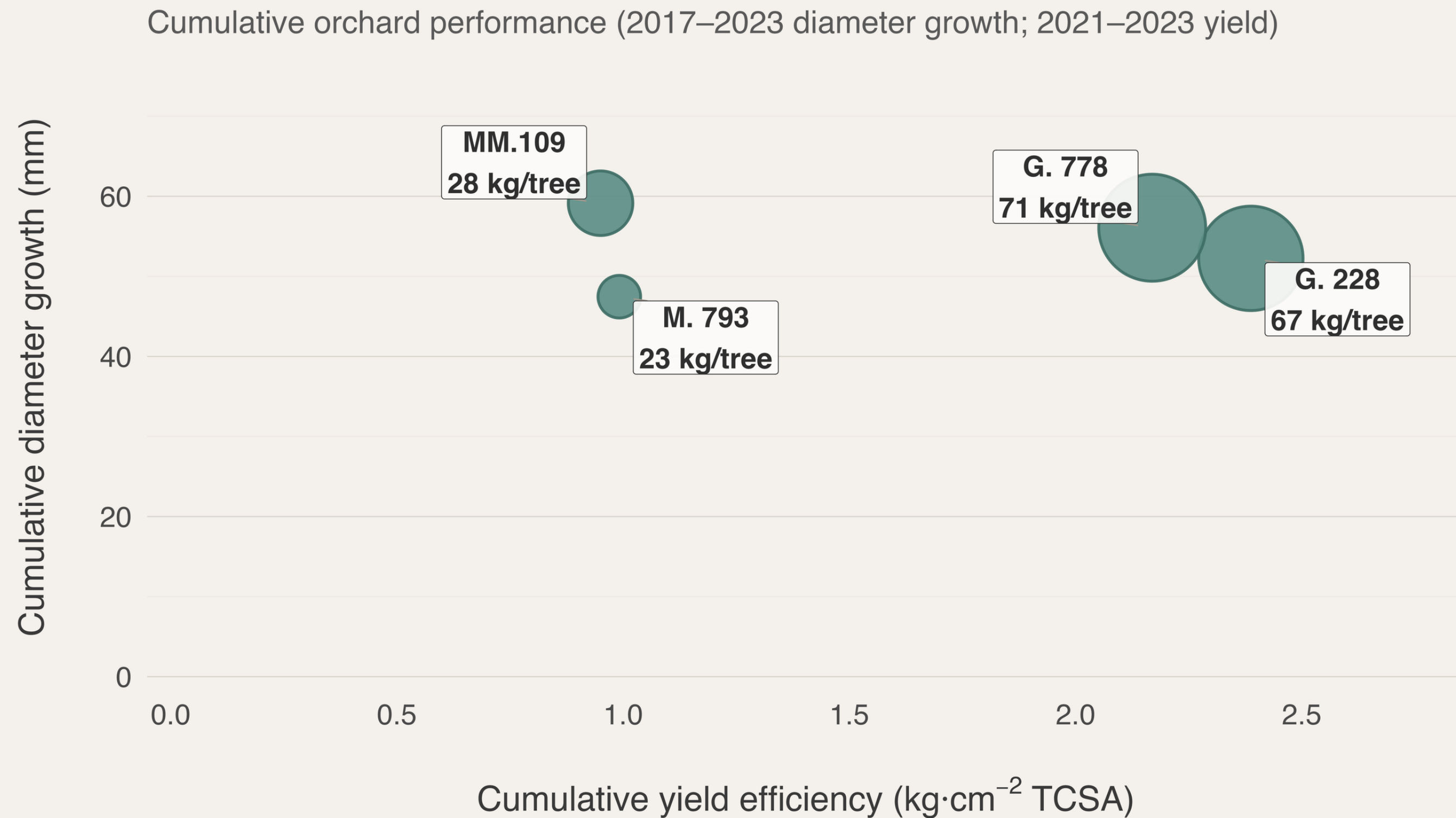
Similar pressures drove similar solutions

Similar climates, similar direction

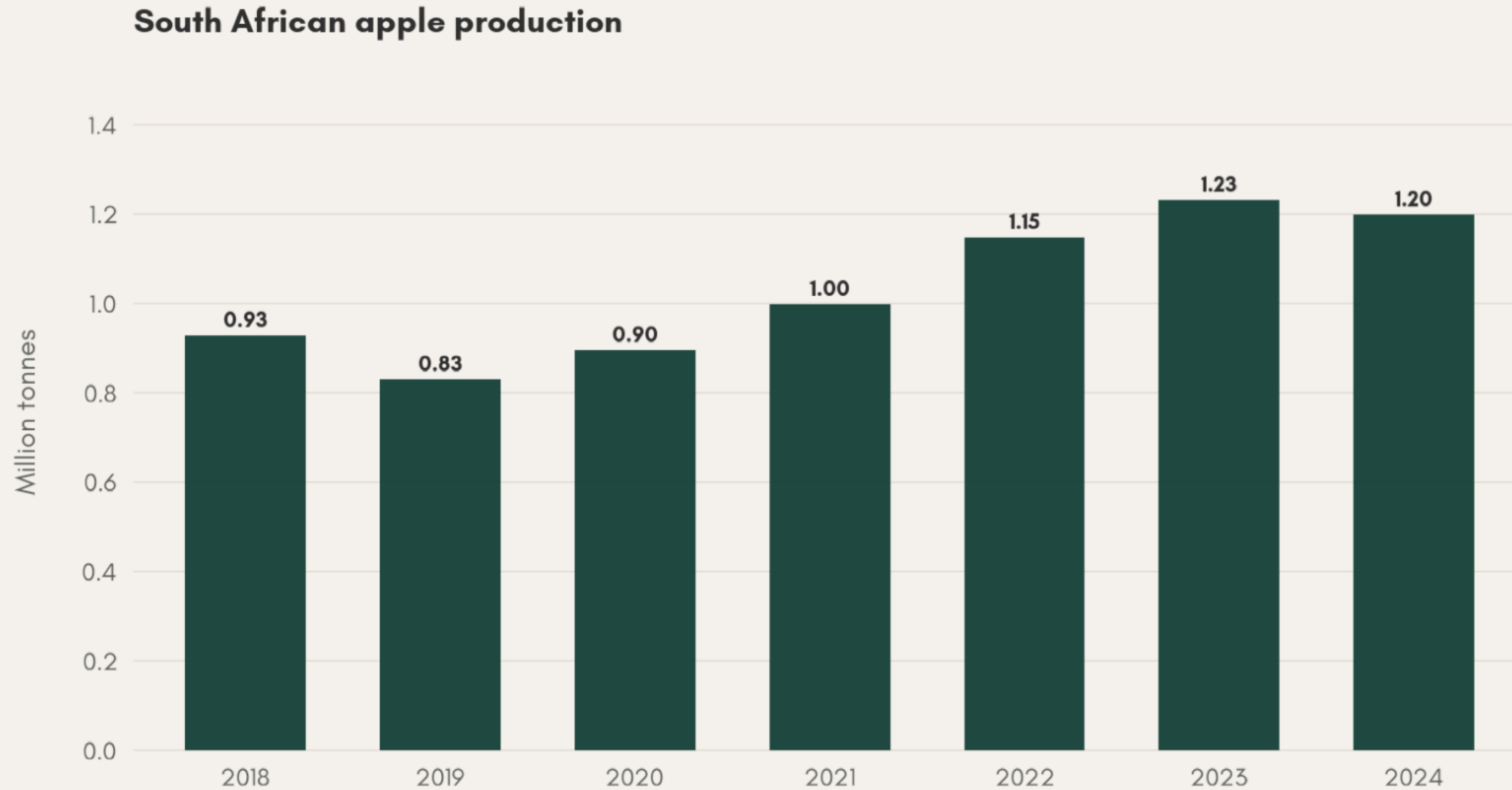
The South African rootstock landscape is diversifying



Rootstocks can fundamentally change orchard performance

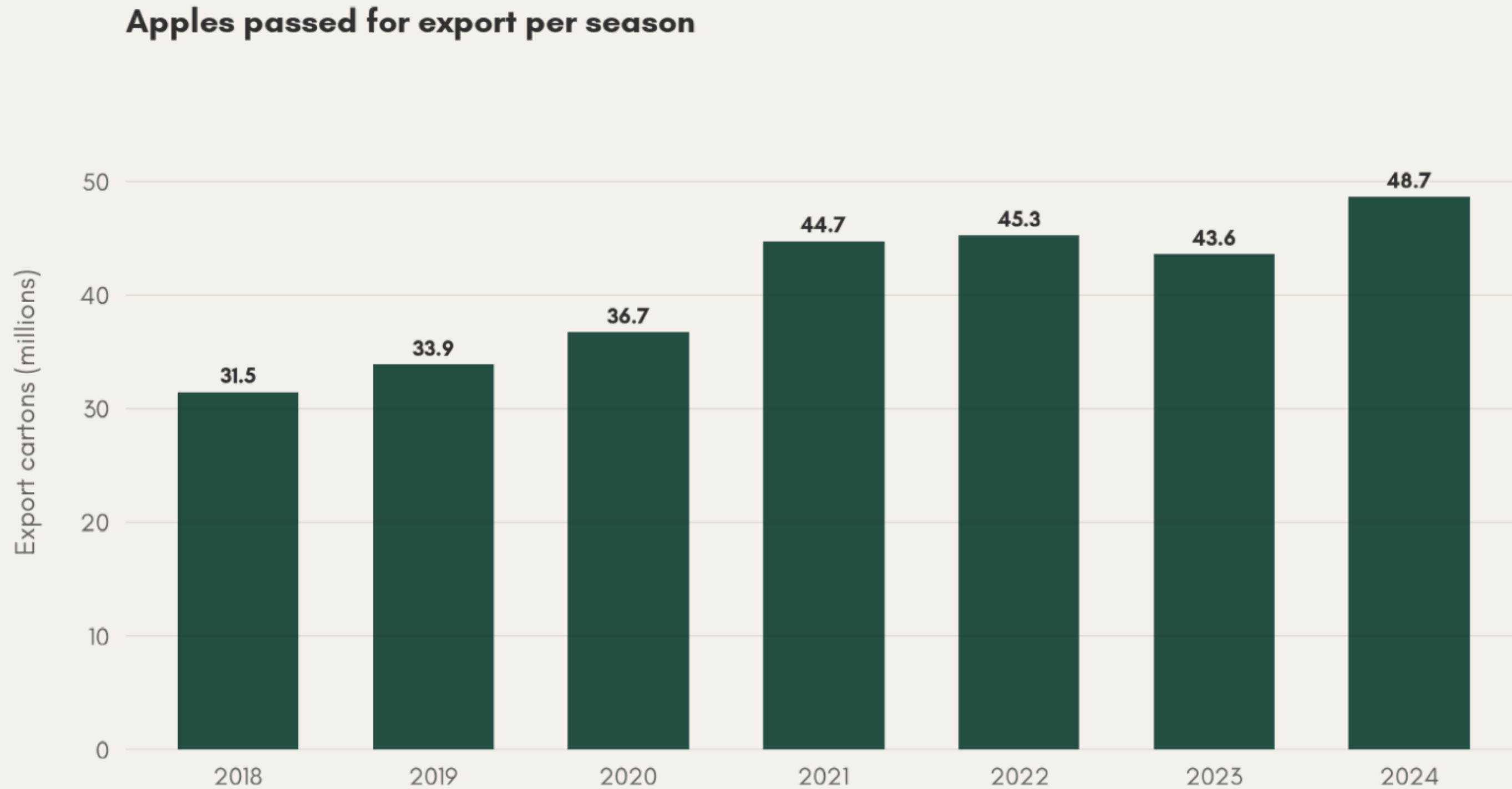


Rootstocks can fundamentally change orchard performance



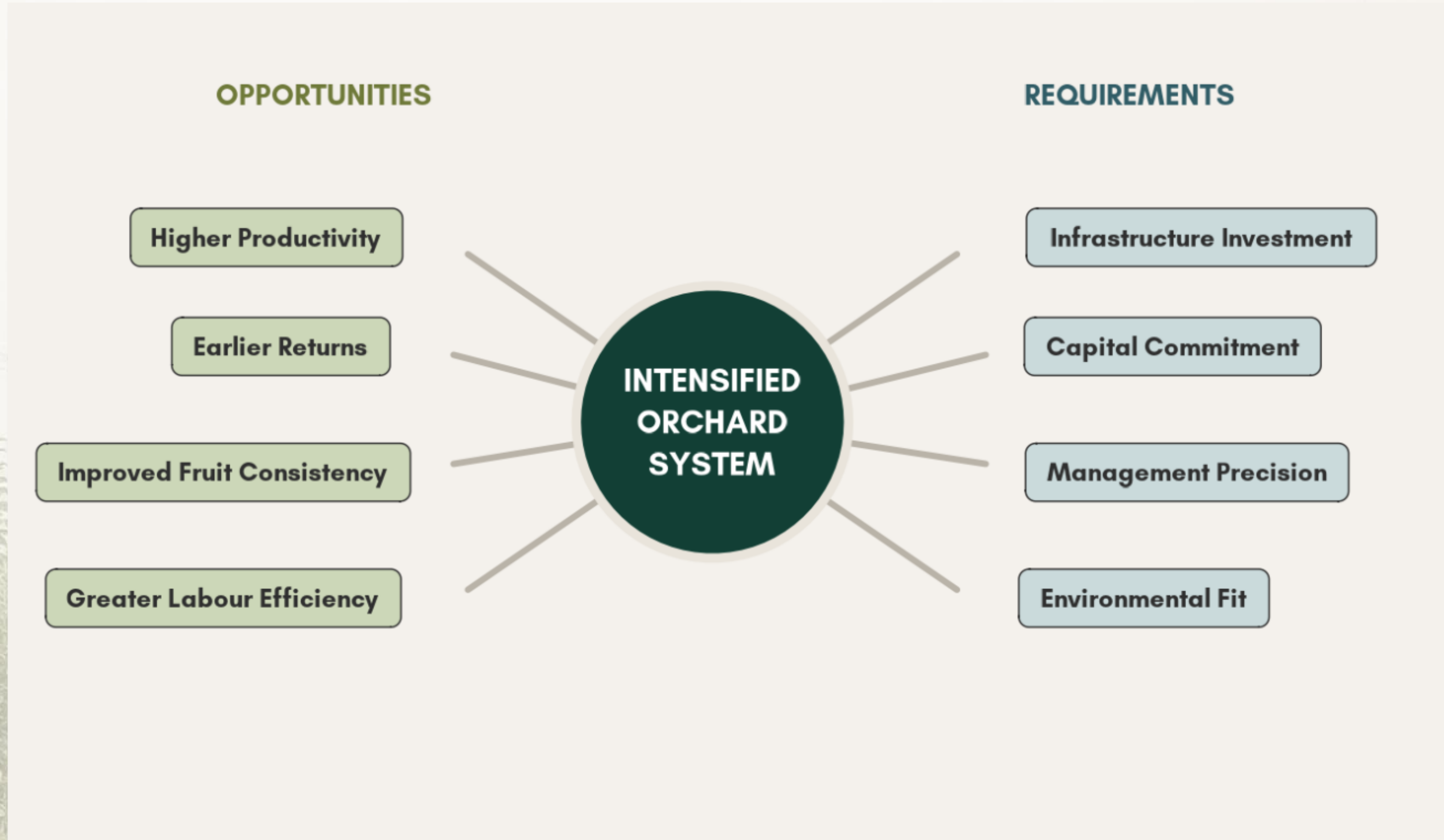
Source: Hortgro. Key Deciduous Fruit Statistics 2024.

Rootstocks can fundamentally change orchard performance

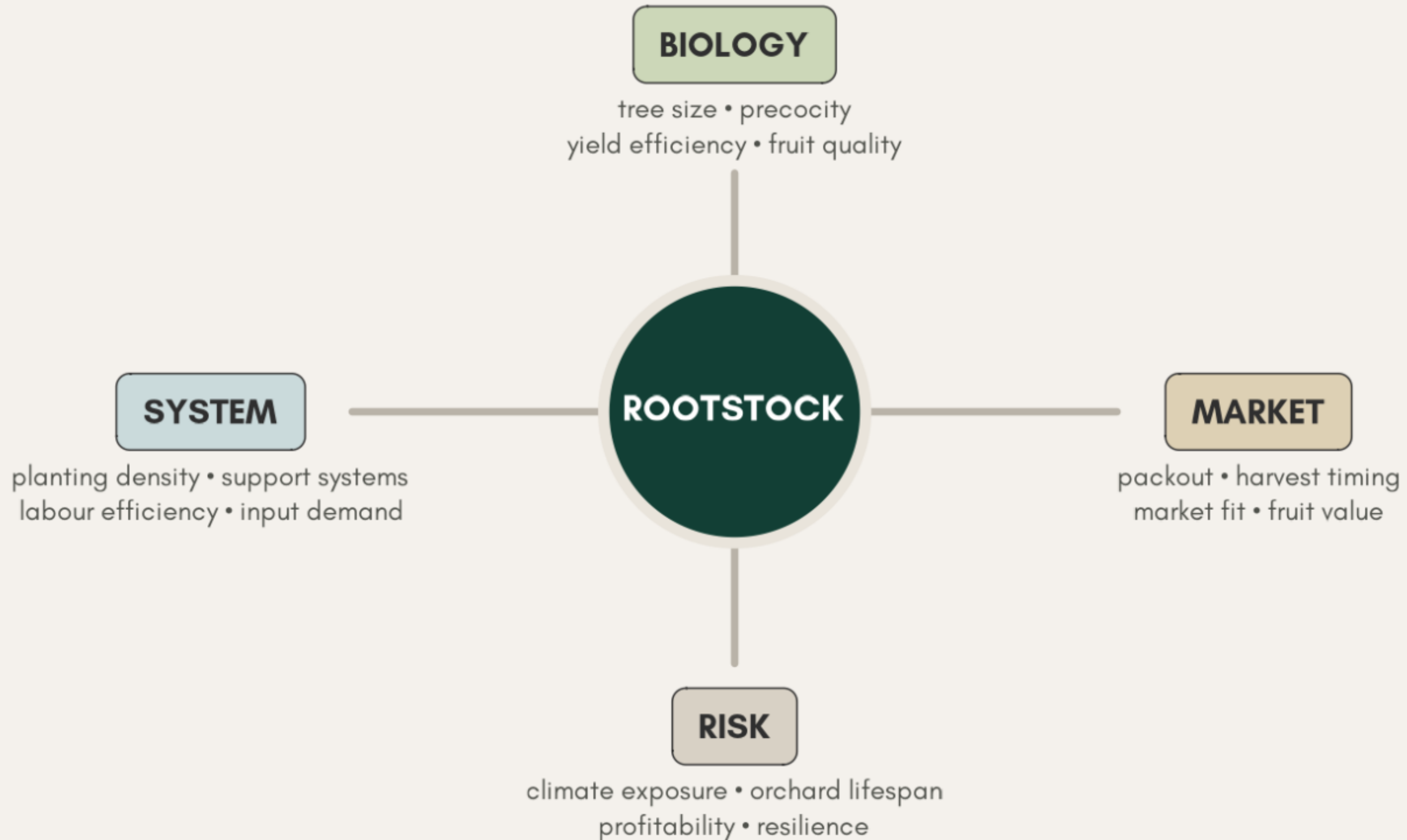


Source: Hortgro. Key Deciduous Fruit Statistics 2024.

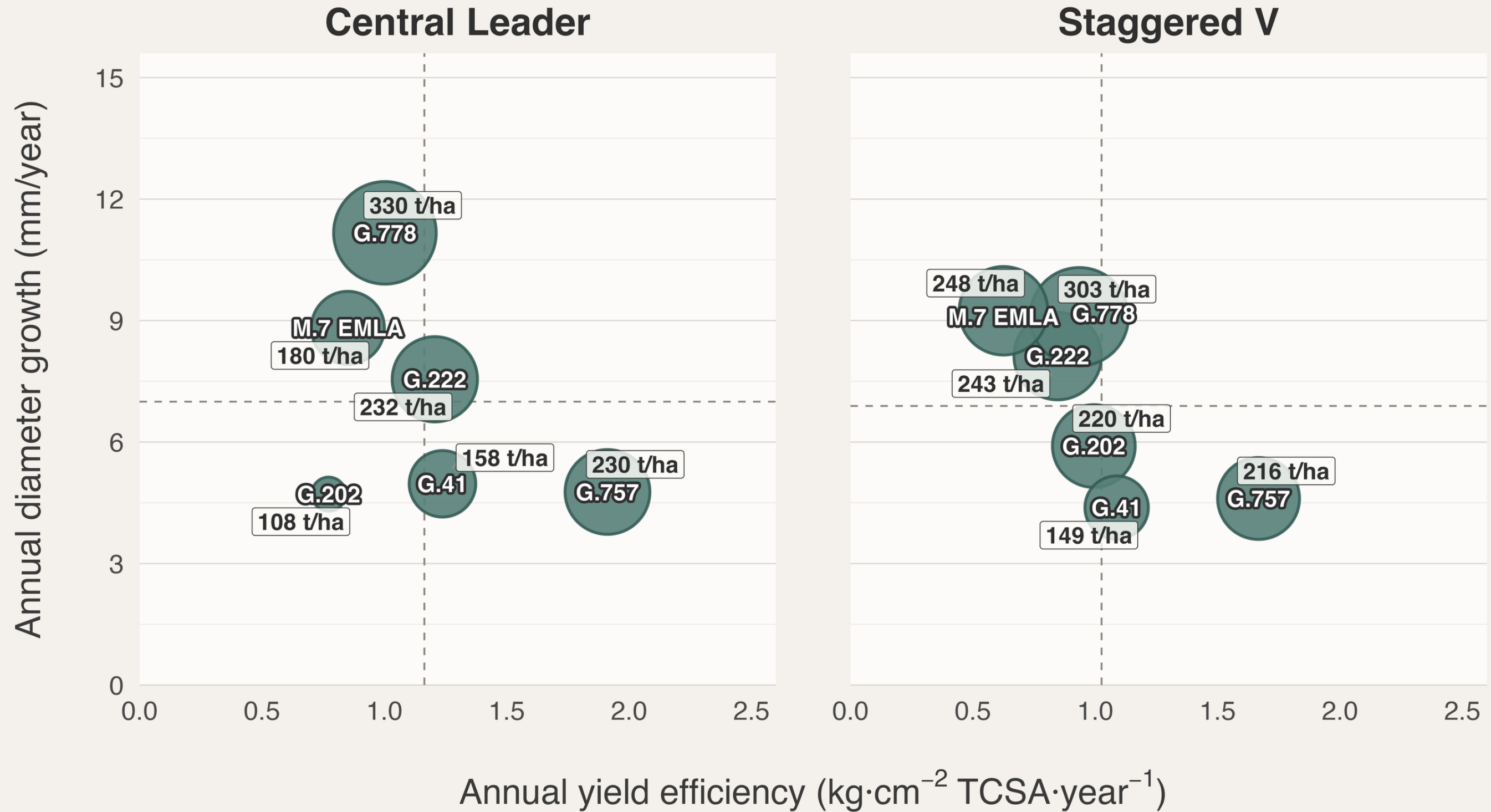
Intensification increases both opportunity and complexity



Rootstocks influence far more than tree size



Rootstock performance is likely contextual



“For most South African soils, it would be difficult to improve on M.793 as rootstock for the apple industry.”

Bergh et al. (1978)



Apple production is a system and rootstocks are a key component

HISTORICAL FOCUS

What can this rootstock do?

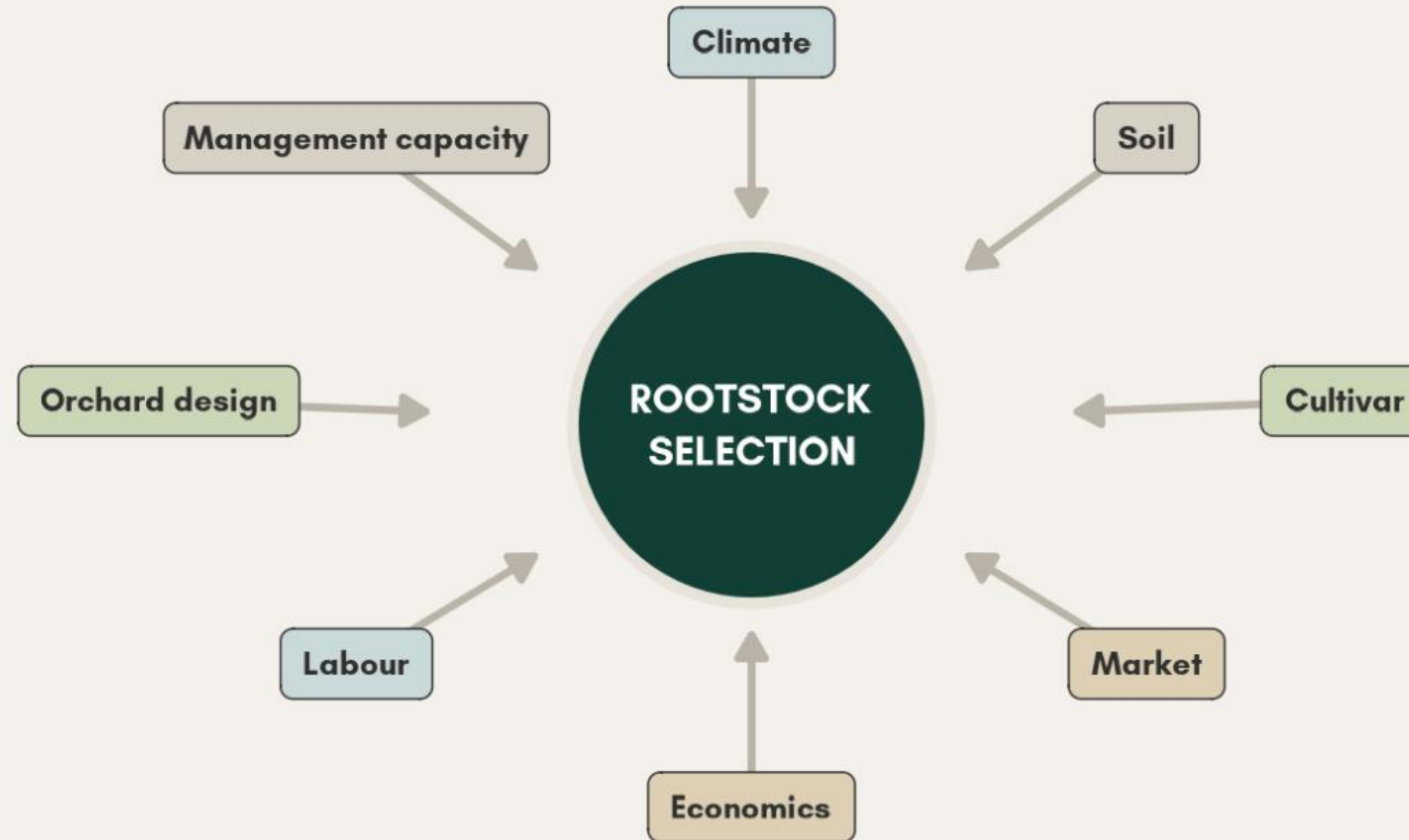
- Tree size & vigour
- Yield potential
- Establishment
- Broad suitability

EMERGING FOCUS

Where does this rootstock fit?

- Climate & soil context
- Orchard design
- Economic objectives
- Long-term resilience

The best rootstock depends on the rest of the system



Rootstocks are enabling adaptation in a more complex industry





THANK YOU!