

# Assisted Migration Adaptation Trial

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Nanaimo



Multi-species trial  
Date Creek



Photo: Barry Jaquish



# Assisted Migration Adaptation Trial

## ➤ Rationale

- Need to better understand adaptation of selected materials in order to better manage our genetic resources

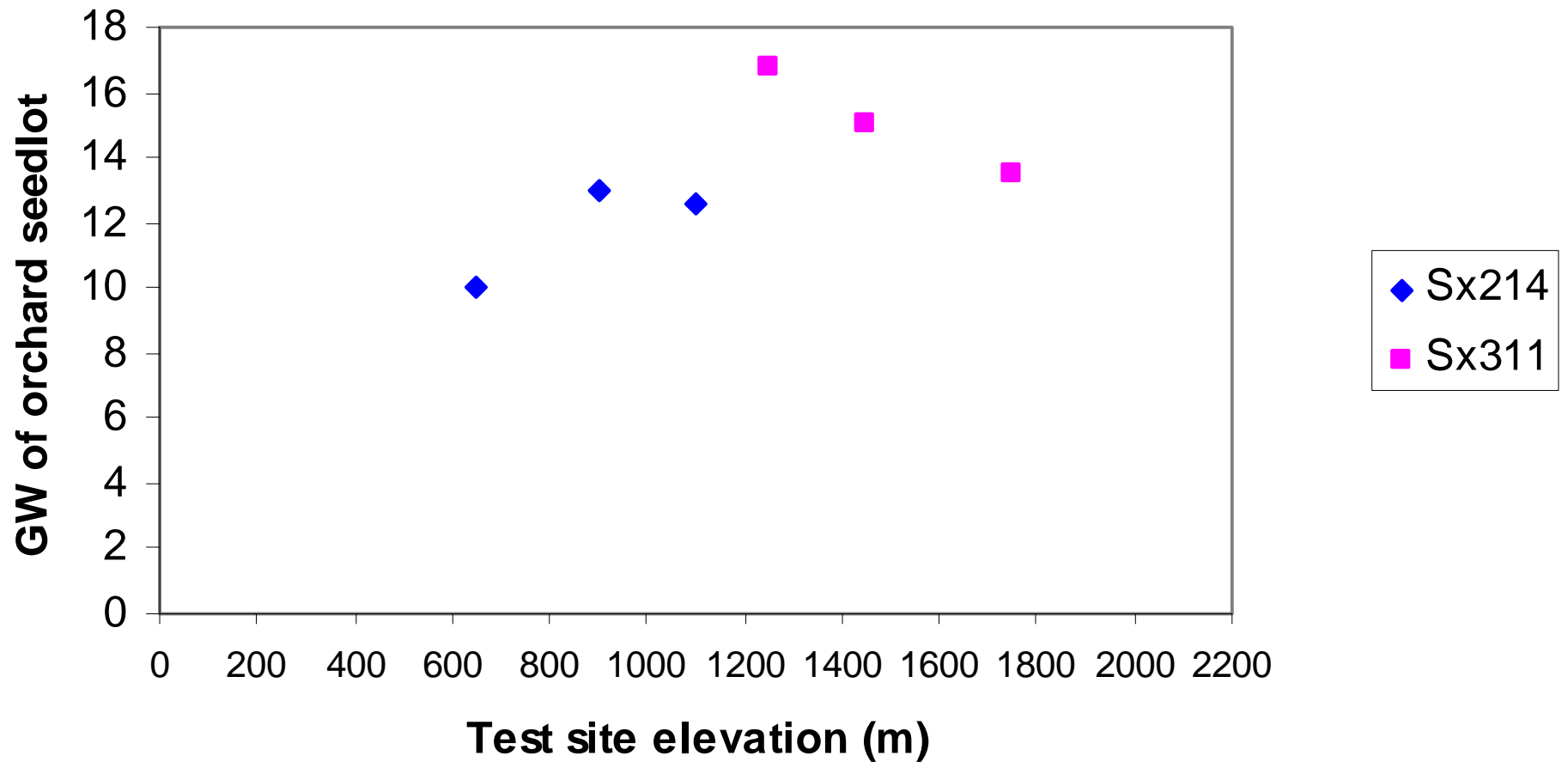
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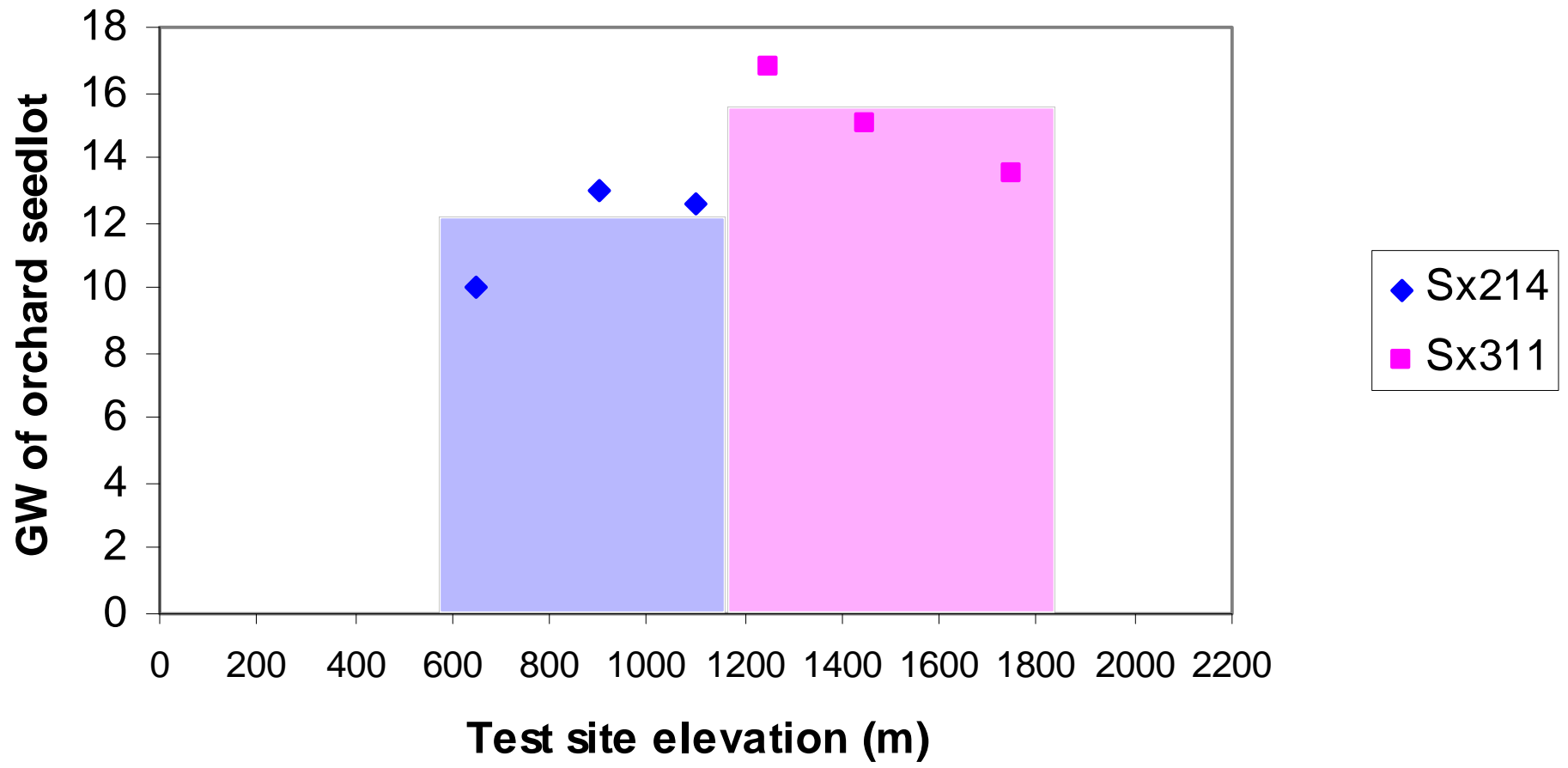
- Need to better understand adaptation of selected materials in order to better manage our genetic resources

## ➤ Goals

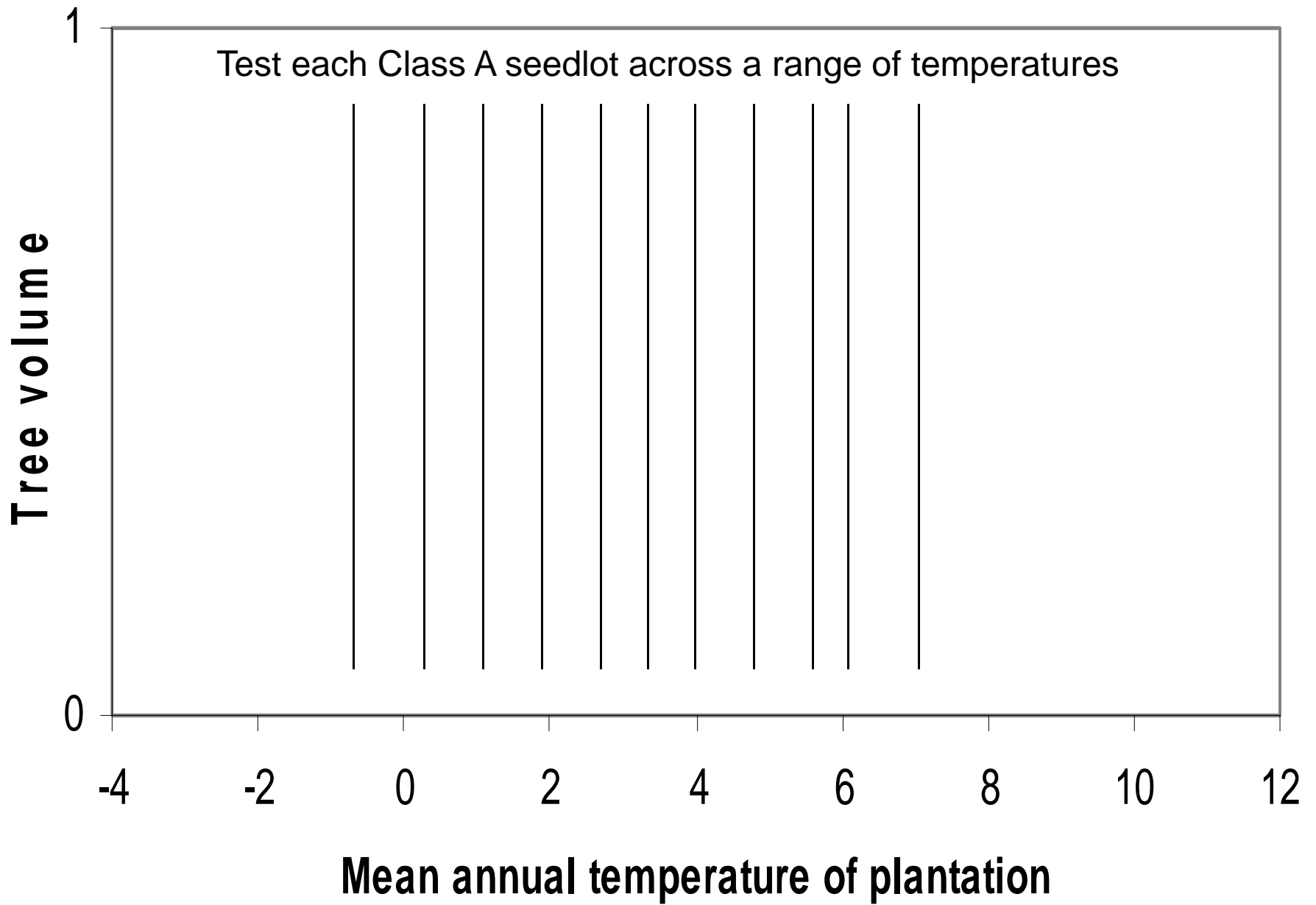
- Develop a seed transfer system that ensures the best plantation adaptation throughout the rotation
- Contribute toward improved species selection system
- Refine genetic gain estimates
- Implement assisted migration

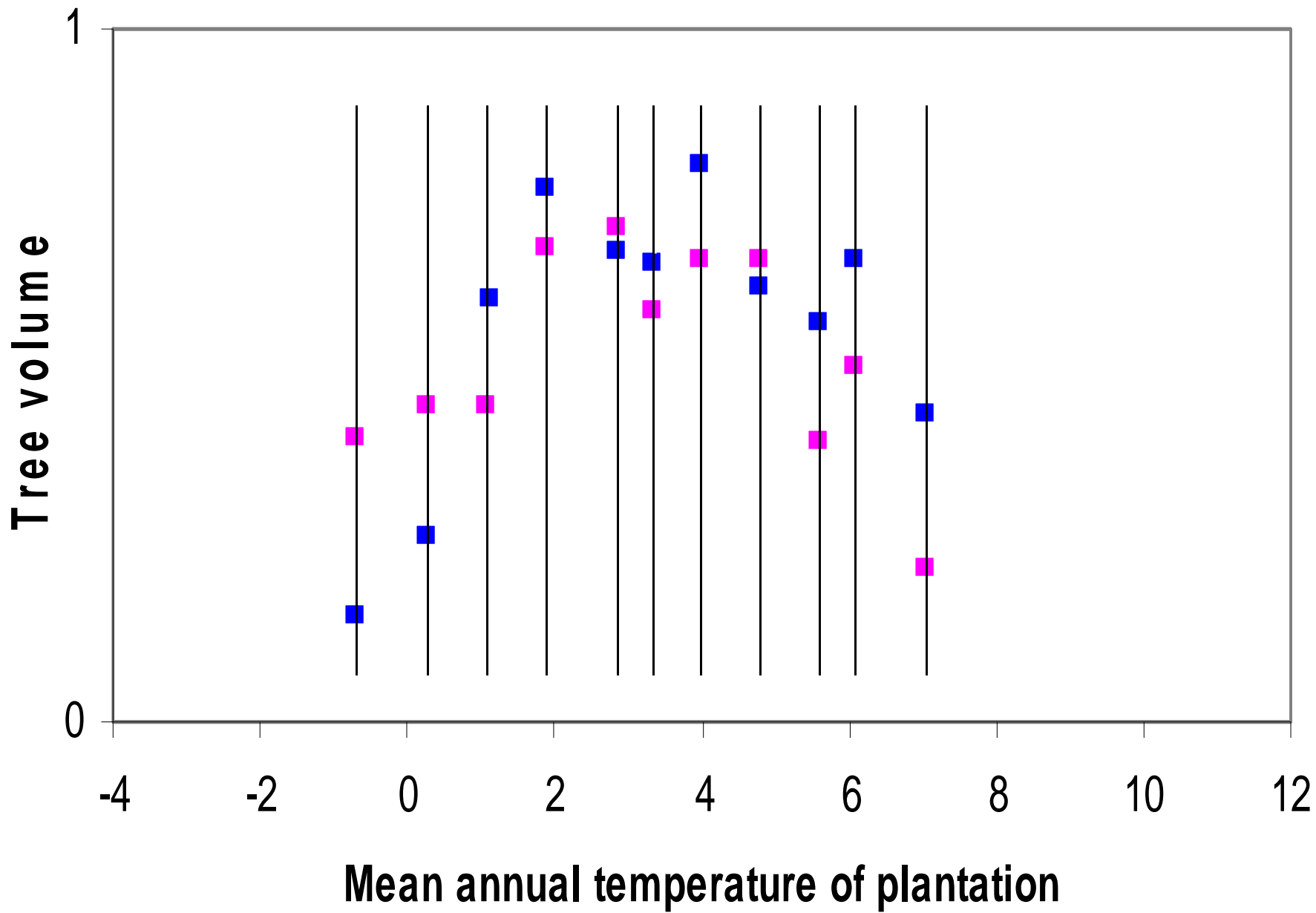


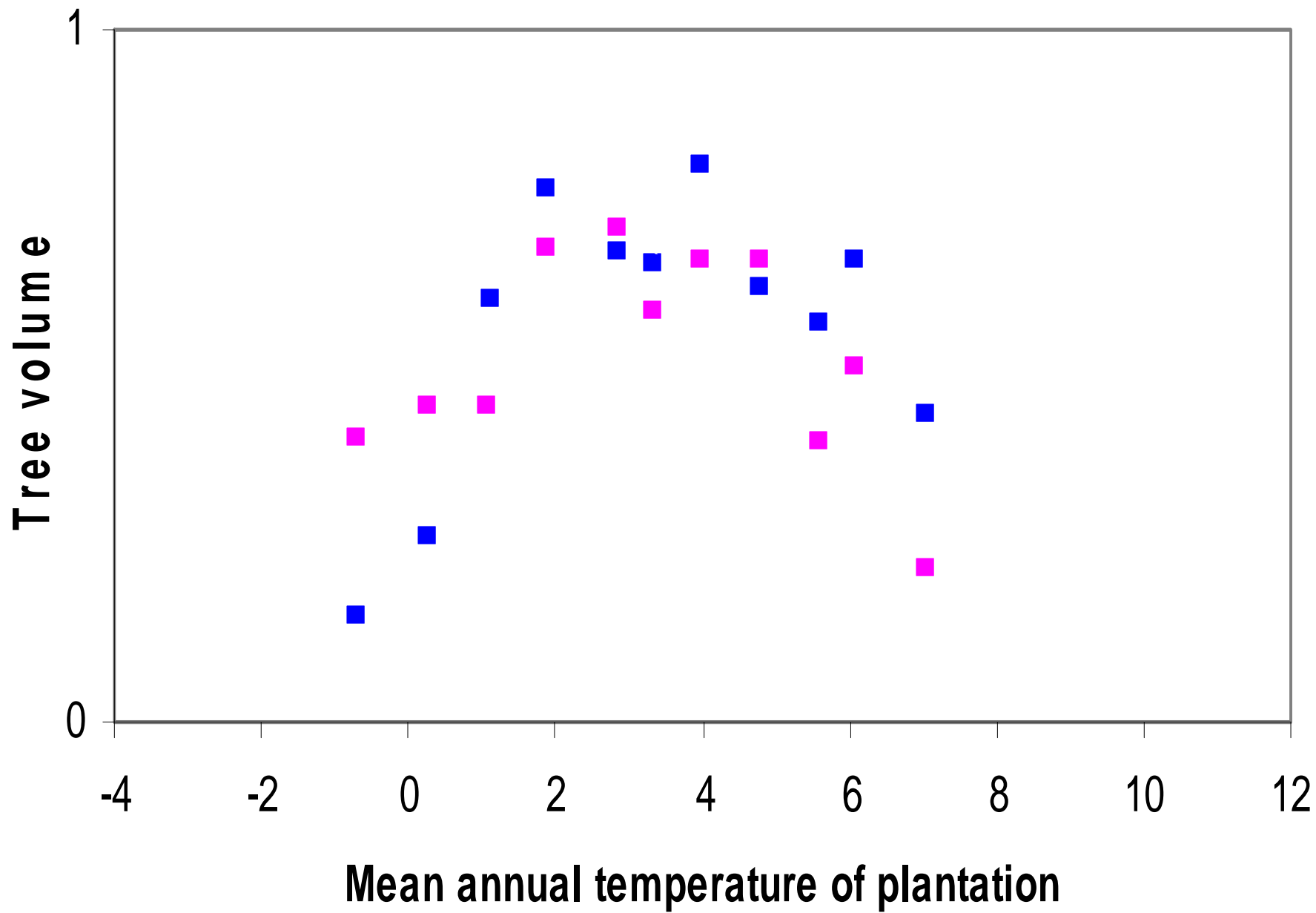
Class A seed transfer distance is determined mainly from 3 progeny tests/SPU.

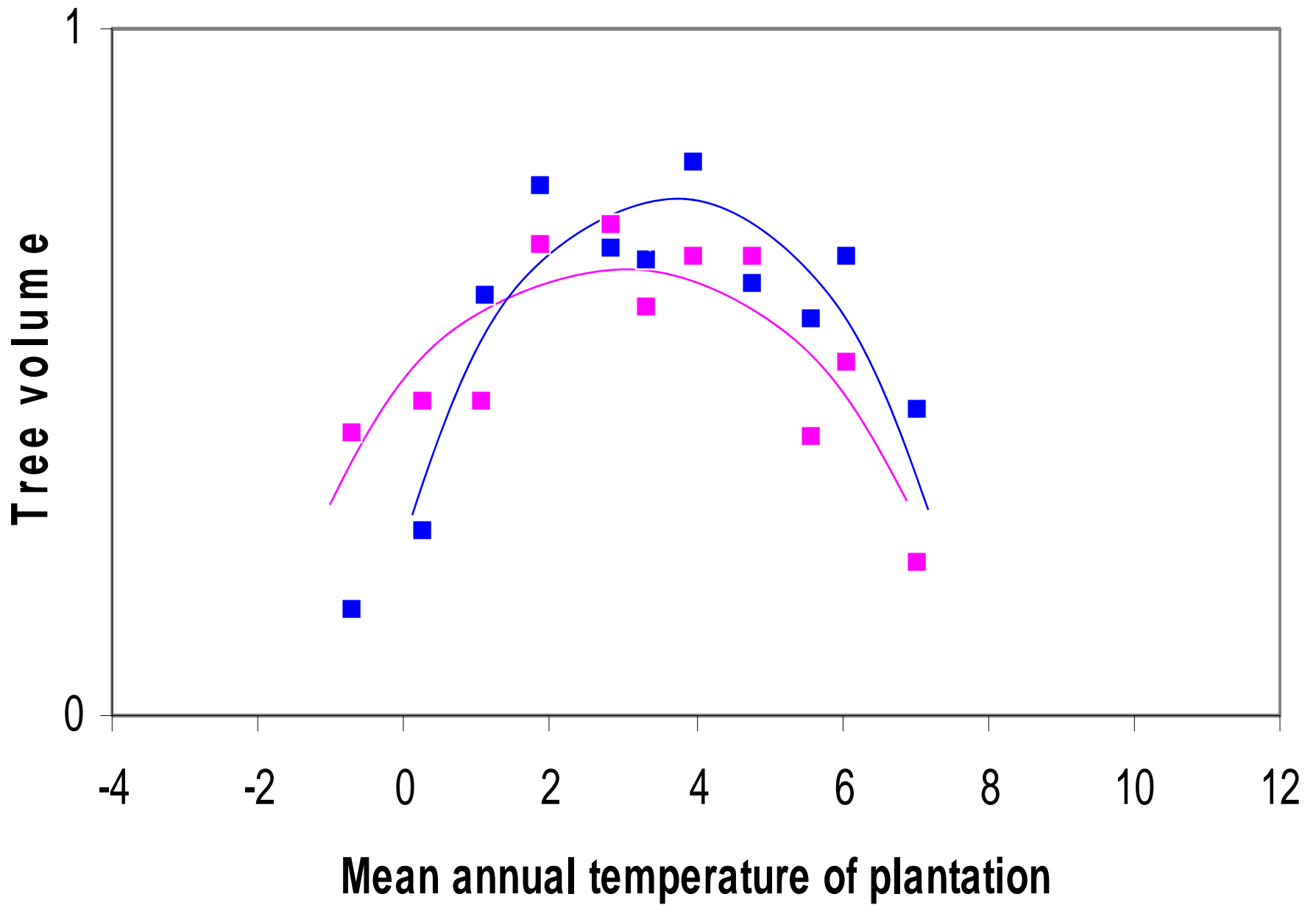


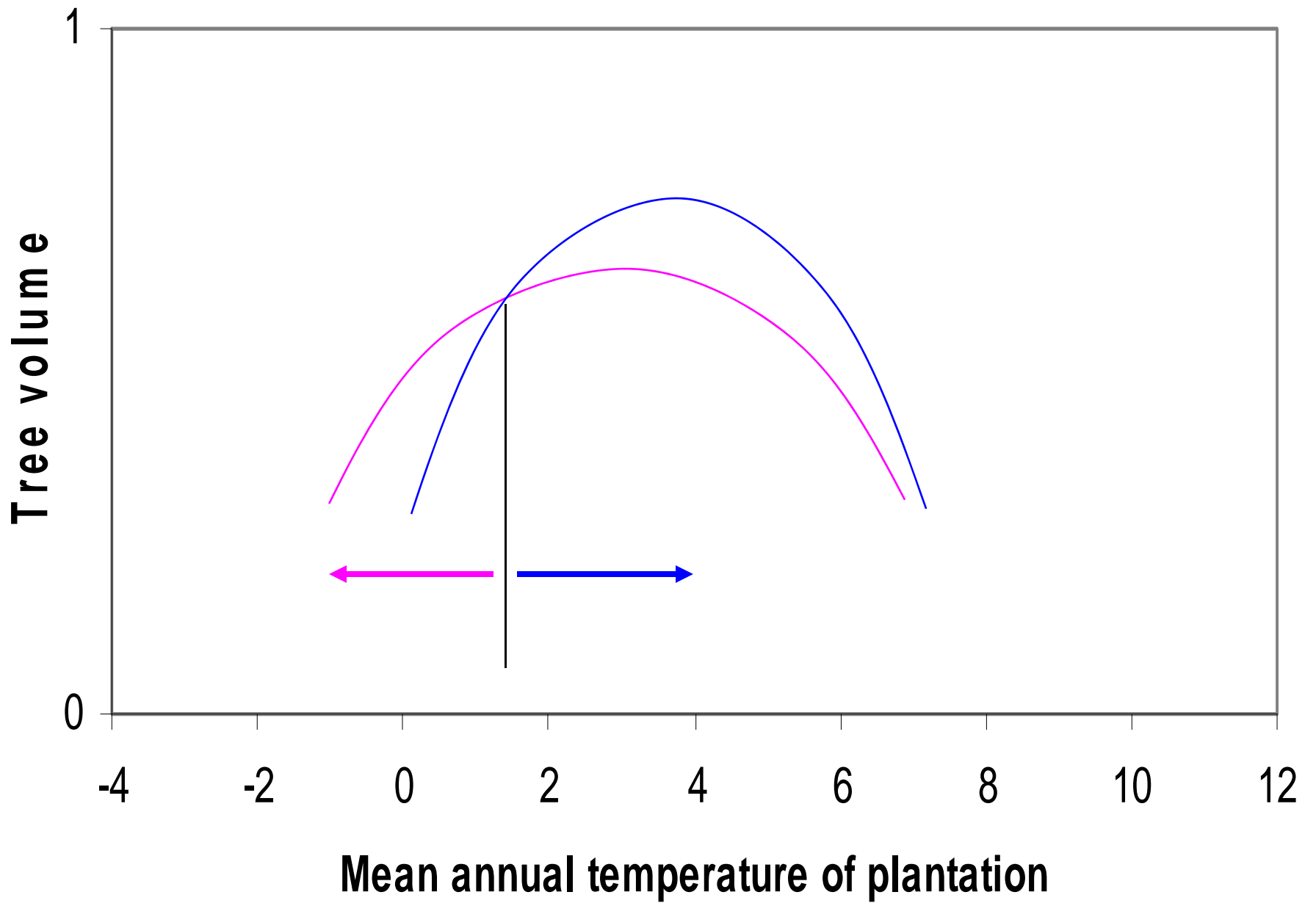
3 test sites/SPU is insufficient to identify the most productive seedlot



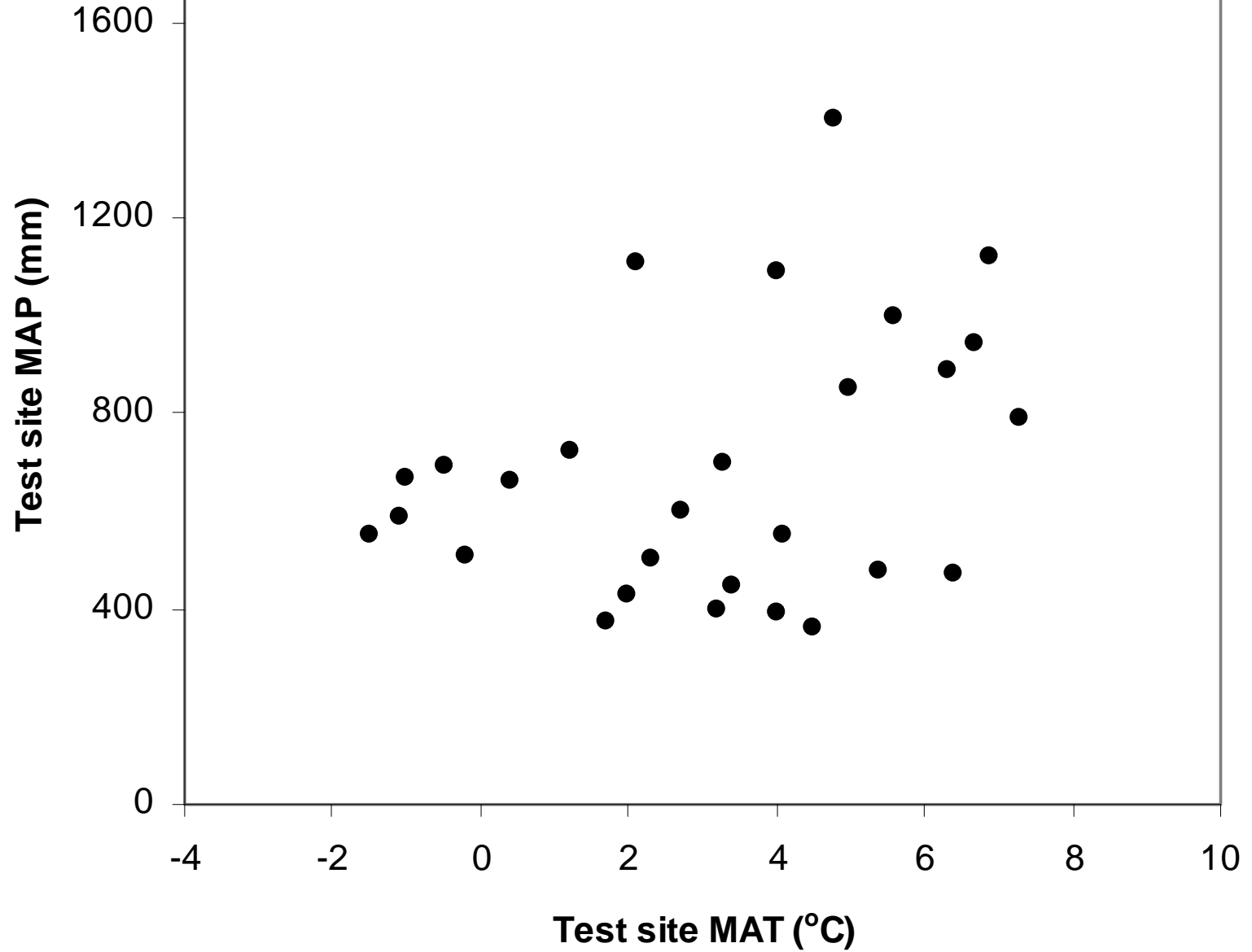




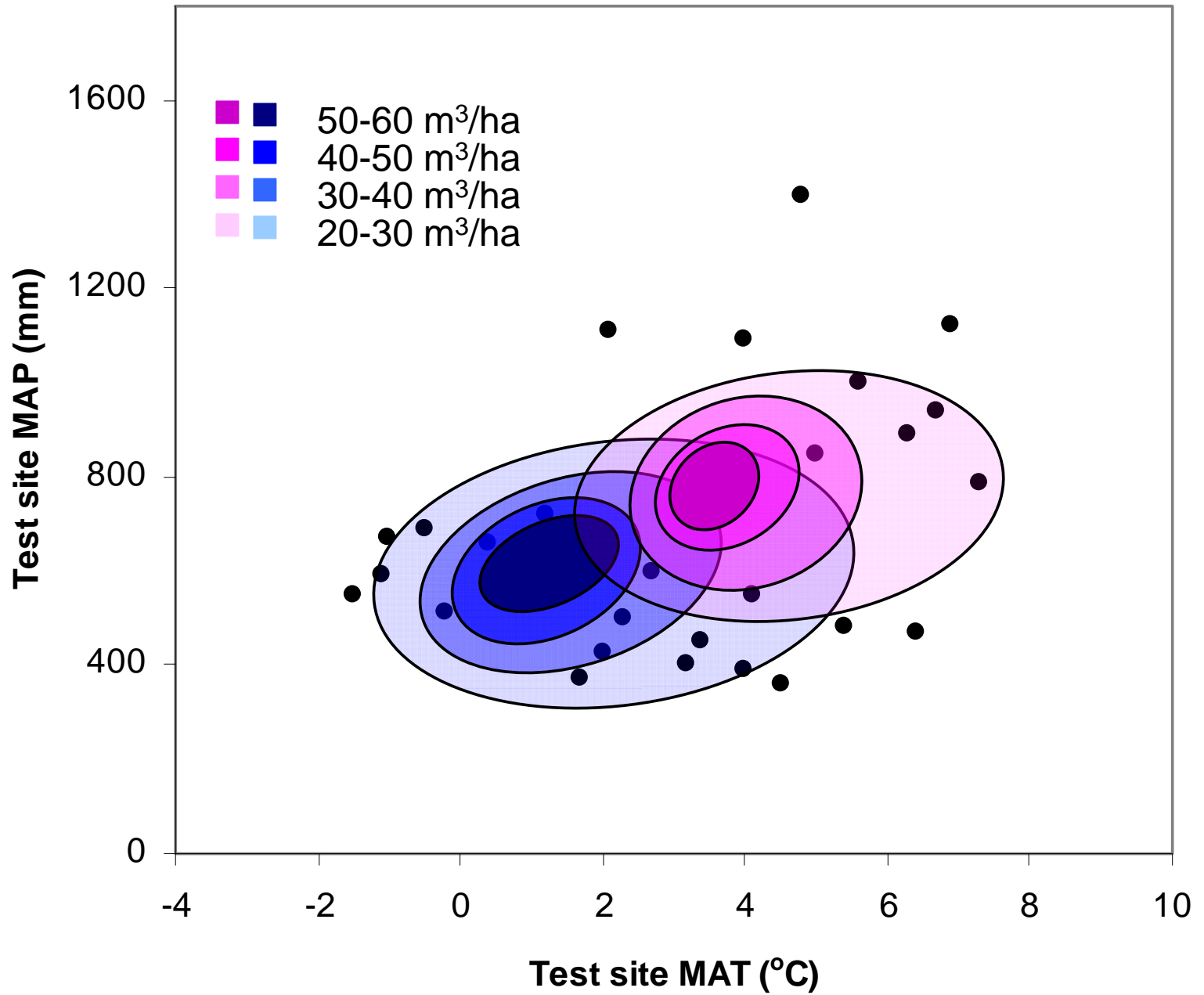


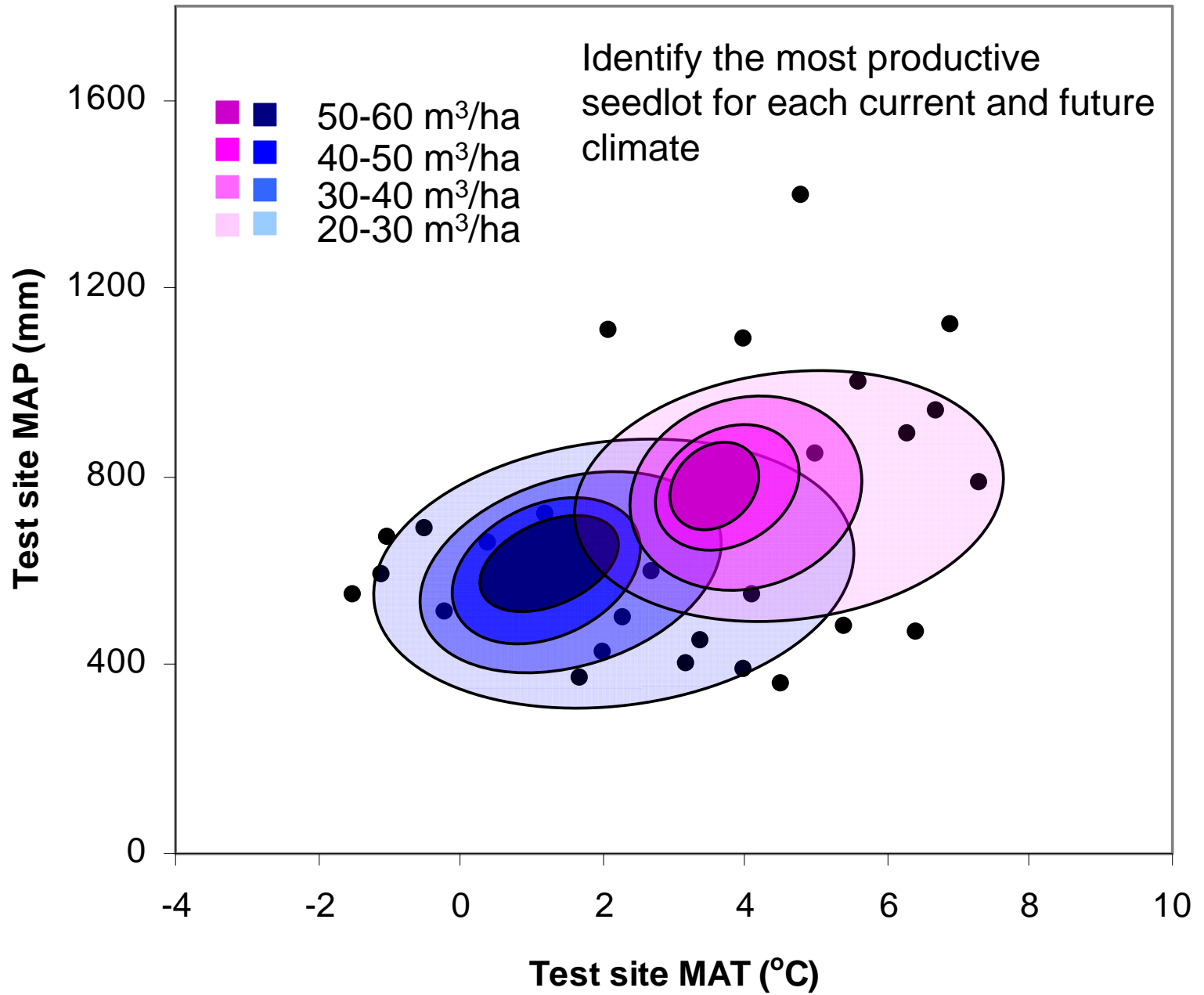


Test each Class A seedlot across a range of climates



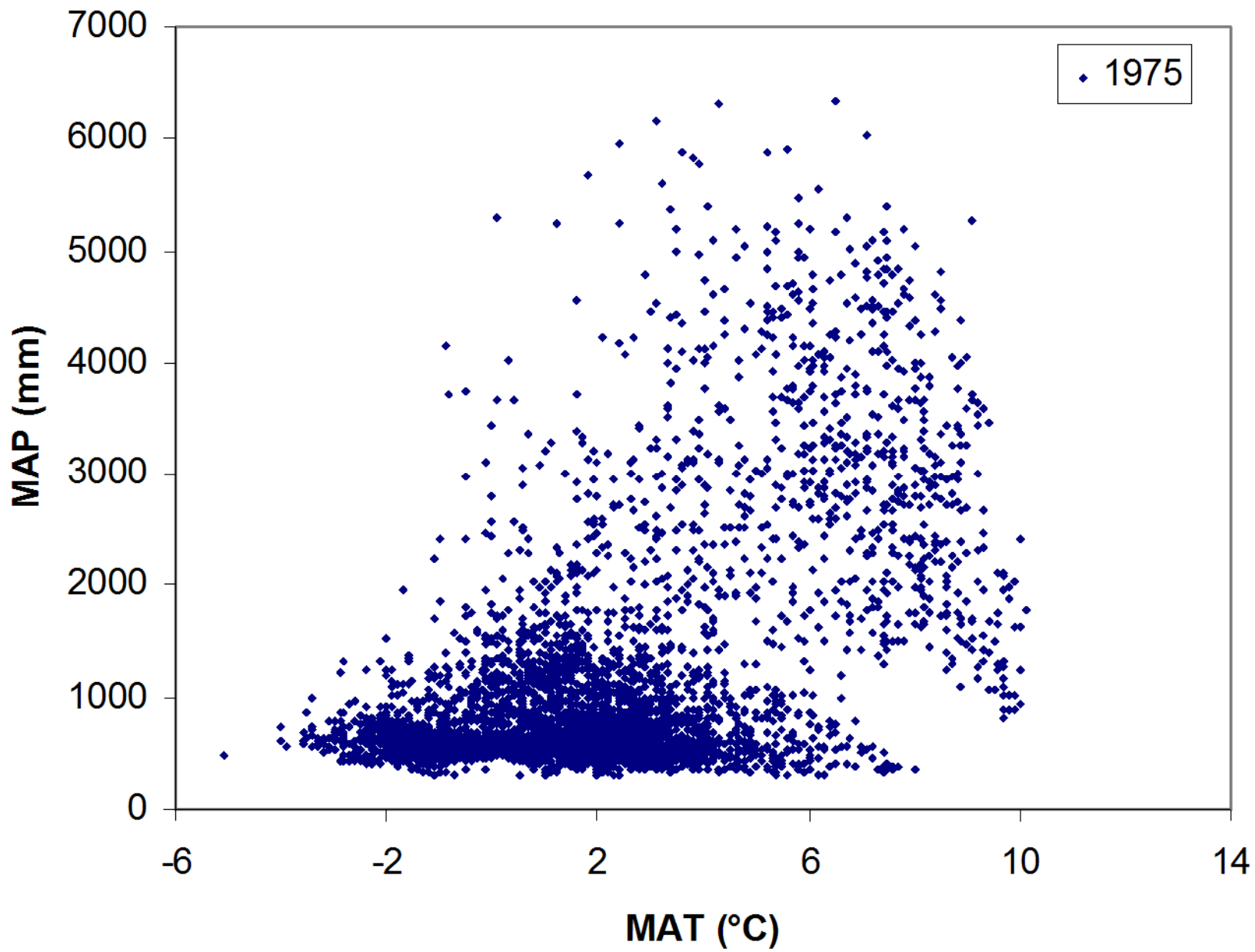


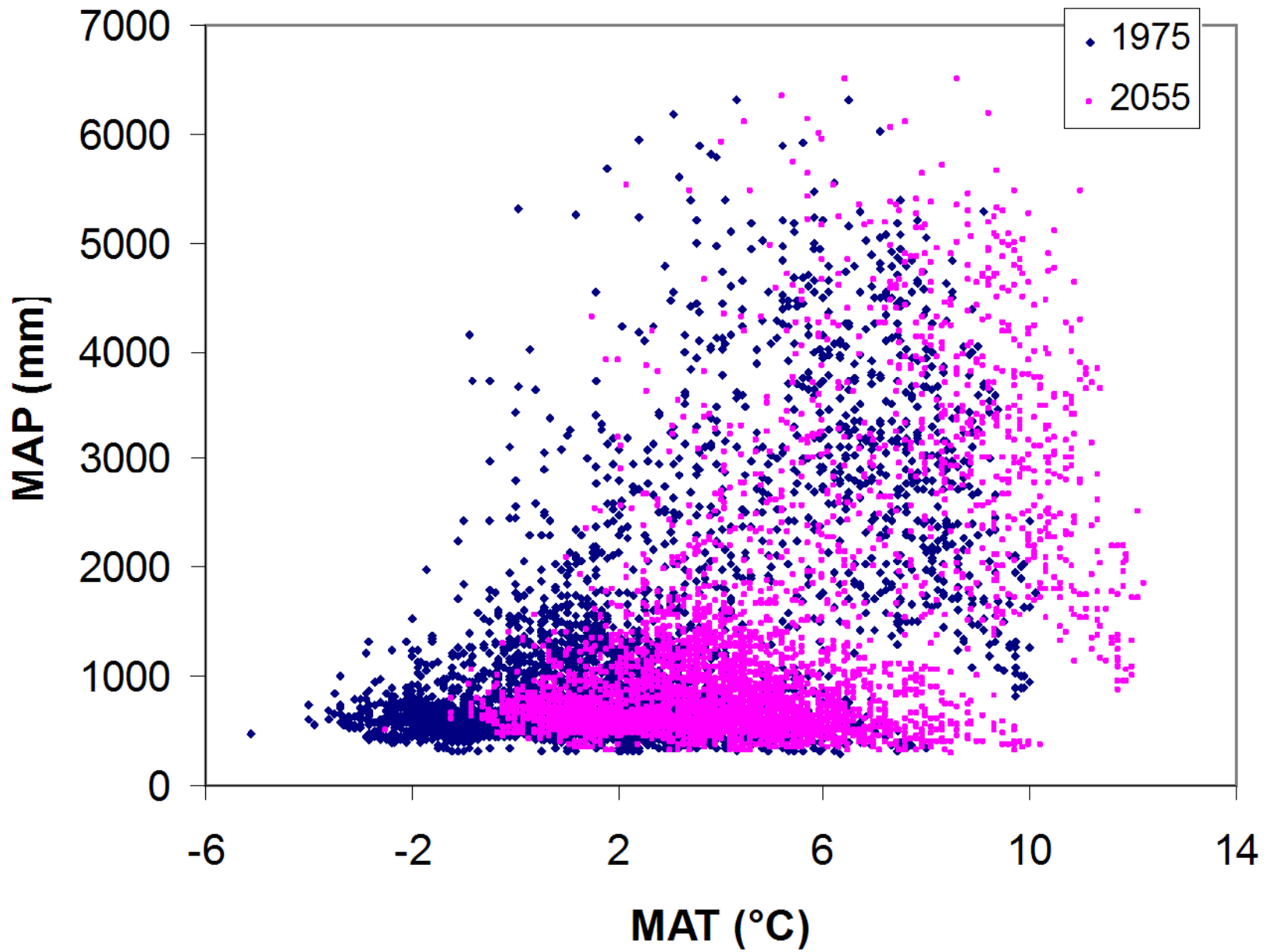


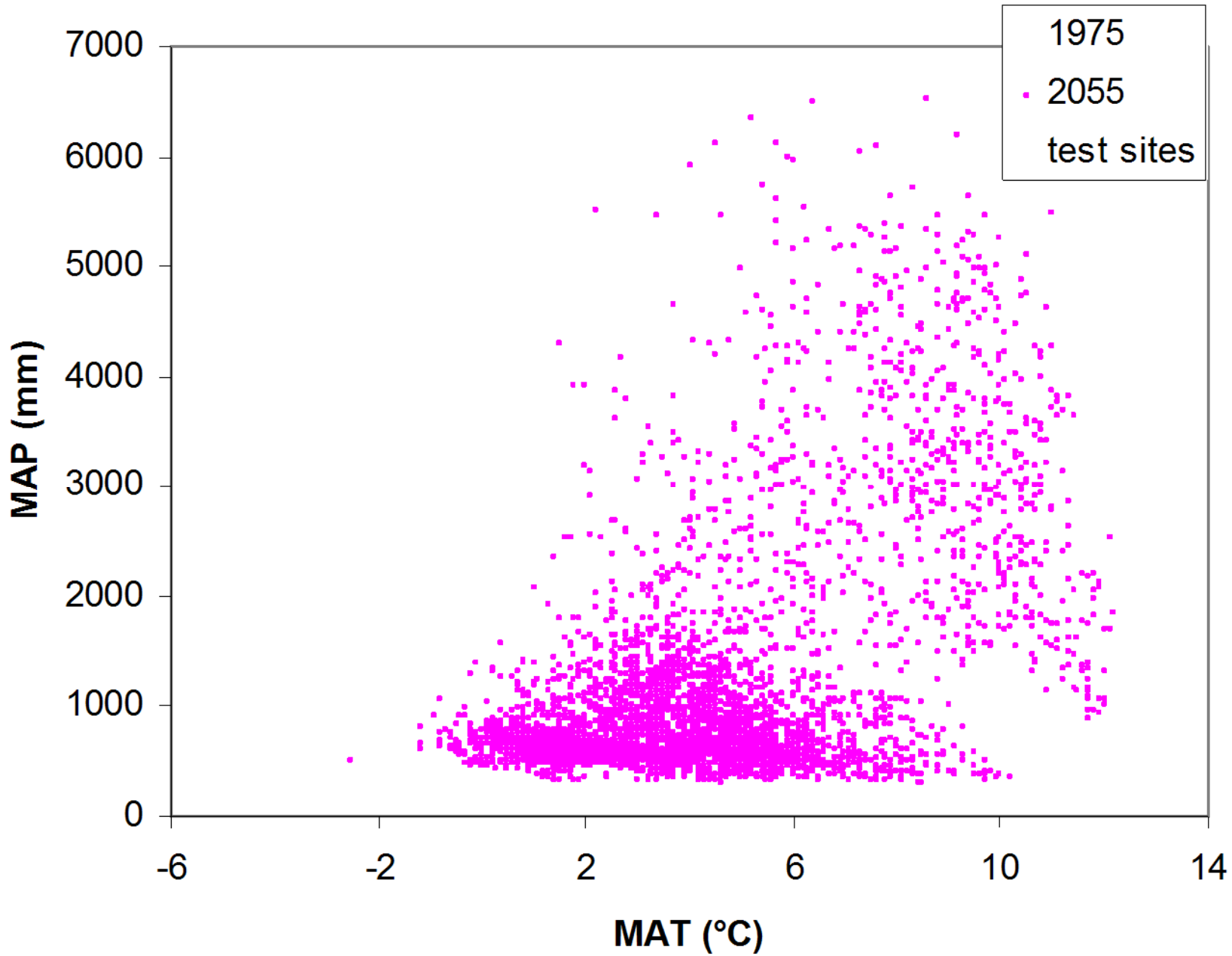


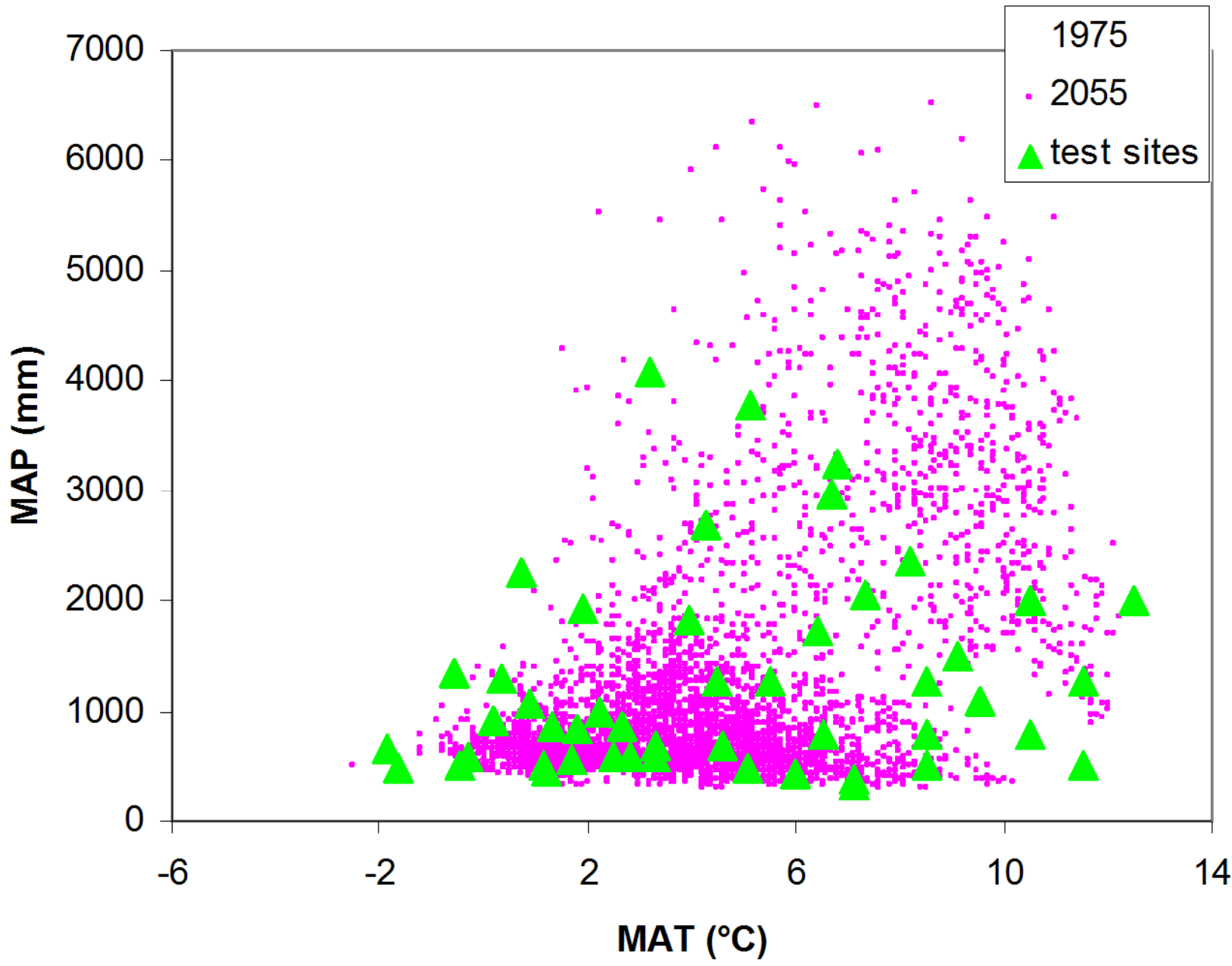
## ➤ Design

- 16 species
- 49 BC and USA orchard seedlots
- local wildstand controls
  
- 48 sites (41 BC; 7 WA/OR/ID/MO)
- 1 site/climate zone
- 4 blocks of 5 x 5 trees
  
- 12 sites/y
- first planting spring 2009









## ➤ Unique features

- tests all of BC's main commercial species (including 3 broadleaves)
- test sites - large number and wide climate range
- includes northern USA populations and test sites
- focus on selected populations
- local controls and large plots allow realized gain estimation



Cy

Cw

Lw

Fdc

Fdi

Ss

Sx

Ep

Es

At

Pli

Py

Pw

Hw

Ba

Bg

Bl

**'AMAT'**

*Assisted Migration Adaptation Trial*

*Species (16) for 2008/2009*

*Trial Series (13 sites)*

