

Oat varieties for organic systems

BENEFITS OF OATS IN ORGANIC SYSTEMS:

- Good weed competition
- More reliable on a range of soils
- Require less inputs
- Better nitrogen use efficiency
- Work well as second cereal
- Yields are generally 80% of conventional, compared to 60% for wheat.



OAT VARIETY CHARACTERISTICS FOR WEED COMPETITION

- **Canopy cover** is a useful trait for weed competition but is linked with crop height.
- Taller varieties have better **weed competition** but also a higher risk of **lodging**.
- Varieties such as **Brochan** would be a good choice for weed competition in organic systems as it has good canopy cover and is relatively short.
- There does not appear to be a yield trade off with height or canopy cover.

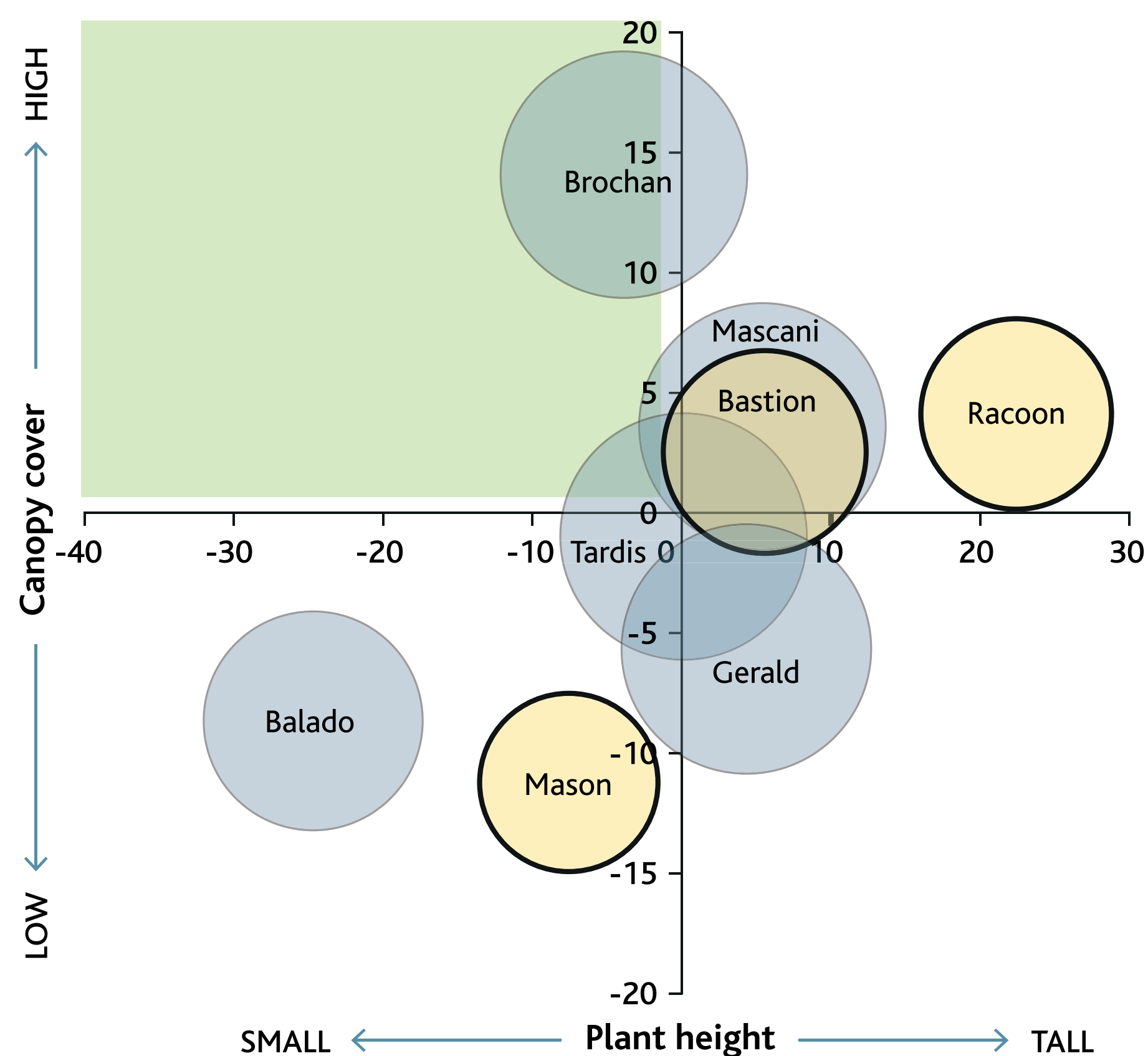


Figure 1: Performance of oats for husked (blue circles) and naked (yellow circles) varieties, showing relative differences (as % of the average) for plant height (x-axis) and canopy cover (y-axis). The size of the circle indicates the average yield of each variety. The green square shows the area where below-average crop height (small stature) is combined with an above-average Leaf Area Index.

