

APPLE BREEDING TRIALS

CUSTOMER

Horticulture Research Station wanted a precision penetrometer for hardness testing of different varieties of apple during plant breeding trials. Flexibility for future test configurations were also a requirement.

PROBLEM

Textural properties and structure of different varieties of apple were identified as critical sensory characteristics. Changes in these properties needed to be monitored during plant breeding work.

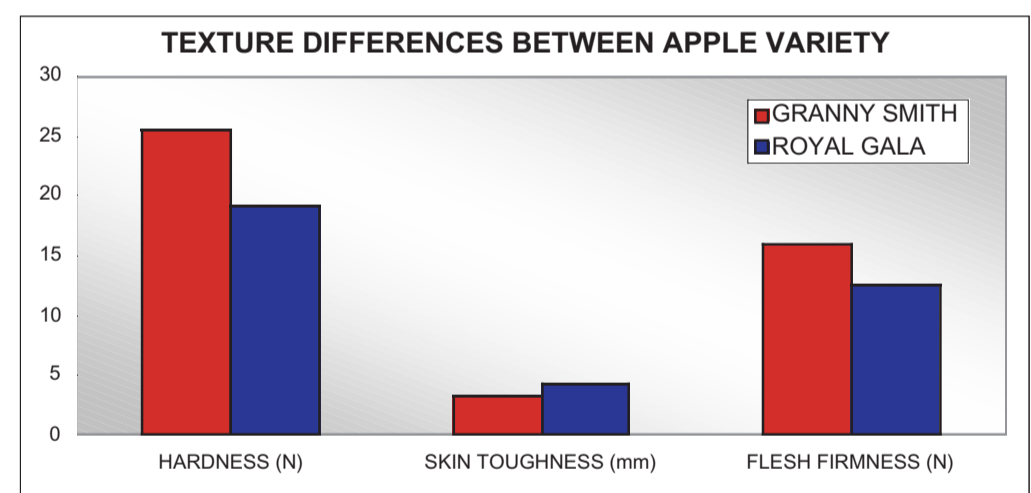
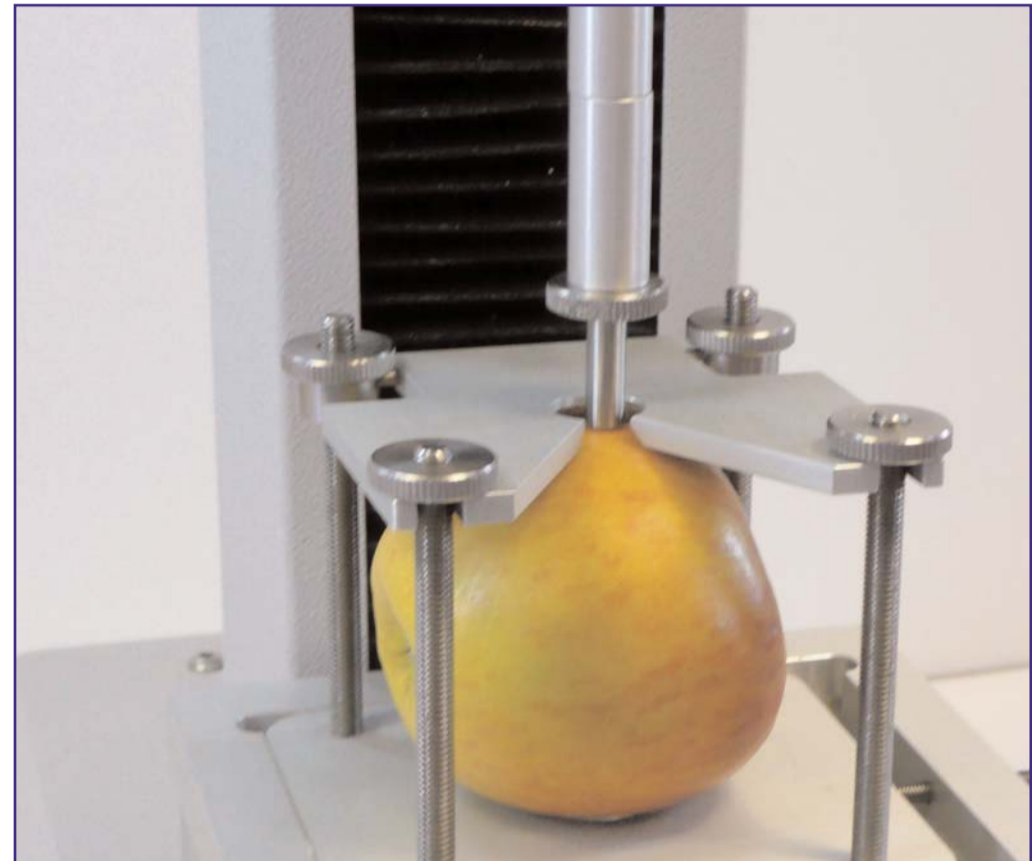
SOLUTION

Penetration testing expanding upon the traditional Magness-Taylor technique provided the research team with detailed information relating to apple firmness, bio-yield and skin rupture or toughness.

- Measure changes in texture between varieties
- Investigate changes on storage and ripening in different modified atmospheres
- Investigate functional properties and performance in finished products e.g. puree, juice, sauces and preserves

BENEFIT

- Simple test to objectively measure apple and other fruit textures
- Software facilitated automatic statistical analysis



PENETRATION TESTING OF APPLES

