BREEDING NEW FLAVORFUL, DISEASE RESISTANT STRAWBERRY CULTIVARS IS MORE EFFICIENT AND ACCURATE USING DNA TESTS

Superior strawberry cultivars that consistently exceed consumer expectations and also meet industry needs for disease resistances, productivity, and storability remain elusive. Such cultivars are possible, but only if breeders can effectively combine the right sets of attributes.

New DNA tests are now being used by U.S. strawberry breeders to do exactly that – combining traits for fruit quality with disease resistance. Strategic application of such DNA tests can greatly enhance traditional breeding programs, without employing GMO methods.

These DNA tests predict
- flavor ("fruity" aroma)
- disease resistance (angular leaf spot)
- remontancy (day neutrality)

Breeders can now more effectively determine the best parents to combine and the best seedlings to advance. This approach reduces the need to grow and sort through thousands of seedlings that are unlikely to meet requirements for both disease resistance and high fruit quality.

Upcoming trait targets for DNA test development include
- multiple crown, root and fruit disease resistances
- fruit size
- fruit texture and firmness
- additional flavor-related attributes

This enhanced breeding efficiency, accuracy, speed and creativity due to strategic applications of DNA tests is enabled by the U.S.- wide RosBREED project (www.rosbreed.org).

RosBREED Strawberry Breeders

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RosBREED

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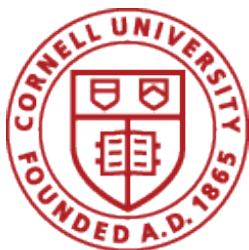
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