

Culteva platform could have worldwide impact

By [Fred Meintjes](#) 13 December 2022

South African data collection and evaluation platform may create trust amongst growers when it comes to planted varieties

The question of which varieties to plant has always been a difficult one for fresh fruit and vegetable producers to answer.



On the one hand, growers need to be at the cutting edge in choosing new varieties, and must often make decisions which will either turn out to be a great success or very costly.

On the other hand, they also rely on messaging from breeders who need to do everything in their power to ensure growers choose their varieties.

“It is a nightmare,” one table grape grower explained. “Apart from trying to be the best farmer and meeting all the challenges that go with that, you also have to know what is happening in breeding programmes around the world.”

This is why the emergence of a variety data management platform developed by Provar, an independent variety evaluation company located in Western Cape of South Africa, is so important.

Branded as Culteva, its creators have said their mission is to continue the development of the data collection platform to generate intelligence and empower clients and industries relevant to horticulture and viticulture by applying best practice protocols and implementing innovative technologies.

“Culteva will become a next level data collection platform for plant phenotyping,” said Miaan Kramer, product manager for Culteva.

Above all, the independent integrity of the information will perhaps bring an end to new varieties being released too early and with big promises before they have been properly tested.

The fact that Culteva is now used by companies in South Africa, Italy, Germany, France, the UK, Finland, Chile and Australia shows promise for a growing user base.

Herchelle Mentoor, marketing administrator at South African variety management company Topfruit, summed up experiences using Culteva: “The role it plays in our organisation is comprehensive in our testing process. We no longer use paper and everything is recorded digitally.

“All observations are noted on the app which is on the mobile phones of our evaluators,” he added. “As a variety developer, this programme is critical to our business.”

With all records stored on the app, decisions regarding the continued testing of a variety or selection are made by looking at the comprehensive reports and aggregated variety info sheets which it generates.

“It is a remarkably powerful app which is extremely flexible, being able to accommodate personalised requirements,” Mentoor continued. “I was not able to do this myself but with support from Provar, it was possible for us to have exactly what we want.”

Kramer said that Provar had developed an evaluation manual which assisted evaluators in their pursuit of a standardised evaluation process.

Provar further works alongside clients to develop new protocols and translations for scientific definitions to be used by non-English speaking users.

Culteva allows for controlled sharing of information between organisations, as well as global reports to be drawn from multiple organisations. Sharing of reports is strictly managed by the licensed user organisation.

He noted that a breeding module was to be developed on Culteva which would focus on expanding features for breeders, allowing for bulk progeny evaluation, selection criteria by flagging an integrated orchard and planting plans to help make selections and the breeding process much easier.

“We also have a project planned to help evaluators schedule and plan their evaluation season integrated with a single platform for all management and reporting needs.

“Finally, Provar is looking to work towards integrating an IP management system along with the evaluation process to manage trees and varieties from beginning to end,” Kramer commented. “We are certain that this comprehensive platform will be extremely useful to our clients, and we look forward to working with companies who may require our services all over the world.”

The latest development includes a tastings module focused on collection of consumer impressions at tasting events. The module is standalone but links with Culteva Evaluations and will add another layer of insight in the reports.

“This Culteva Tastings module was used by a leading European apple breeding company at Interpoma in Bolzano this past November with positive feedback.”

Users of the platform, some leading South African IP managers and exporter groups, have said they were impressed by what they had seen so far. “As we integrate it further with our full commercial services, we will see further benefits,” noted one executive.

Kramer added that Culteva would be developed to include other crop types and remote sensing technologies.