



A DAY IN THE LIFE OF A RESEARCHER

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The average person might complain about their nine-to-five jobs, but that pales in comparison to the work hours of the researchers at Provar.

One such researcher is Anika Kock. She and her colleagues are currently working – among other things – to collect data for the [Pro-Hort program](#). This collaboration between Hortgro and Provar aims to generate accurate information on which to base cultivar selection.

Anika oversees the stone fruit cultivars and uses the data for the Pro-Hort plum adaptability project.

“The Pro-Hort program is an advanced screening evaluation,” says Anika. “This means we are looking at all the stages of the tree and the fruit. The project will take around eight years to complete.”

The researchers at [Provar](#) must drive between sites to see how the cultivars are faring under each location’s unique circumstances. They evaluate these cultivars to see how they will fair once planted by producers.

“The whole point is to ensure the best yields of the best product,” explains Anika.



Anika Kock inspects the size of the fruits

Provar analyses cultivars on roughly 20 sites across the Western Cape, which means their researchers spend a lot of time on the road. Anika says that she often works from 07:00 to 19:00 – as aforementioned, the nine to five pales in comparison.

On the day Hortgro joins Anika, she only has two locations to visit, one in Robertson and another in Montagu, making it a more relaxed day – despite the 270 km drive. “Yesterday I drove about 400 km so this is nothing.”

Once she arrives at the site, Anika walks through the orchard to evaluate each tree and its yield.

There are four trees of each cultivar planted in three blocks. Some trees get interventions and others do not, as the team needs to assess how trees react in specific settings.

As she walks, she picks some fruit and takes a bite. “I try not to eat too many fruits, I will make myself sick,” she laughs.

Provar sometimes hosts taste tests with the surplus fruit to see what cultivars are most liked by consumers.



Researchers inspect apple trees in the Pro-Hort orchard.

The next step is to make notes on how the plants are faring. Like most things in life, the evaluation process has been made easier with the help of technology. Each tree has a unique barcode which, once scanned, takes you to the plant's own page on an app developed by Provar.

"The app makes it so much easier; I don't know how people did this job without it."

On the app, Anika adds pictures and notes detailing how the plant and its fruits are faring. She will later use these notes in her final report on the cultivar.

Once she has scanned all the QR codes and made some notes, she starts harvesting fruits from some of the trees. "I take about 40 fruits from each cultivar and really just do it at random, so it gives the best snapshot of what the trees are producing."

Part of the study wants to look at variation between the fruits from the tops and bottom of the trees. "So, when I pick, I try to keep those fruits apart so when I get back to the lab I know what I'm looking at," says Anika.

After she has picked enough fruit, she makes further notes on the app. "We have to think about how the tree will grow but we also have to think about how well the fruit can be picked and stored."

She points out one nectarine cultivar, where the fruits are growing too close together. "That will make it harder for pickers, so I have to make a note of that. Ultimately, the product has to get to the consumer intact."

Weather plays a huge role in the Provar researchers' work. They must be aware of how the weather might impact the different cultivars and harvest times in each location.

“You can anticipate when something will be ready to harvest. But weather plays a major role, so we have to keep our eyes open.”

After the fruit is harvested at every site, it's back to the lab in Paarl where various tests are done on the fruit, like post storage and post shelf tests to see what the product will look like by the time it gets to a consumer on the other side of the world.



Anika shows off one of the cultivars that has shown potential.

“We want fruits to be able to keep until it reaches their destination, wherever in the world that may be. We don't want buyers to say that fruit turned brown after sitting on their counter for one day, so that is why we do post shelf-life evaluations.”

At the end of the season, all the information gathered will be used to compile a report which will be given to all involved parties.

“I love food and plants. So, this field is perfect for me,” Anika says.