



Gerard Poldervaart
gerard.poldervaart@fruitmagazine.eu

A good ground plan, the basis for the ideal layout of a new orchard

Info

Costs

Surveying the plot, making the drawing, consultations with the grower and staking out an orchard of up to between 15 and 20 hectares takes approximately ten hours. Van Oostrum charges for these hours plus an amount for travelling costs.

Before creating an orchard, increasingly more fruit growers are having detailed ground plans made of the orchard or even the entire farm. Using such a plan, the orchard can be laid out as efficiently as possible. Moreover, it can be used to determine the exact location of the rows of trees, the posts for supporting the trees, the irrigation pipes, and the posts and anchors of, for instance, a hail protection net.

Dutchman Dick van Oostrum has already made such ground plans for a large number of growers. Fruit growers have learned about the benefits of such a plan not only in the Netherlands, but also in Belgium, Great Britain and even Iraq. It usually takes no more than two hours for Van Oostrum to survey an orchard irrespective of whether it is 1 or 10 hectares. In this time, he determines the dimensions of the plot and the location and lie of, for instance, ditches and pipes. On a digital map, Van Oostrum then draws the exact dimensions of the plot, but also any ditches, large trees, pipes and drainage pipes.

Ideal layout

In consultation with the grower, Van Oostrum determines the 'ideal' layout of a new orchard. The row layout ensures the maximum number of rows and trees. The drawing also shows the location of the anchors and posts required to support the trees and how the pipes for drip irrigation or sprinklers can be routed the most efficiently. For plots that are not square, the drawing shows exactly how long the rows must be to

allow a tractor and sprayer or a harvesting train to easily turn in and out of the rows.

When the location of all rows, pipes and posts have been determined on the drawing, Van Oostrum marks out the start and end of a number of rows using stakes. From here, the fruit grower or contractor can determine the position of the other rows and posts.

Required materials

The plan can be used to calculate the exact number of trees, concrete posts and even the number of anchors and the amount of steel wire/cable needed to create the orchard. That also applies to the construction of hail nets or covers for cherries or berries. Just as when laying out the orchard, Van Oostrum uses the drawing to determine the precise location of the concrete posts and anchors. A great advantage is that the grower knows well in advance of the construction date how much material will be needed.

A practical example

"I used the ground plan to request quotations for drip irrigation and sprinklers", explains a fruit grower who established an entirely new farm. He sent the plan to three suppliers and requested that they made quotations for the installation of irrigation and fertigation on the entire 25 hectare farm. "By sending the same drawing to all three suppliers, the quotations could be exactly compared and I could easily make the best choice", he explains.



Behind his laptop, Dick van Oostrum puzzles over the drawing until he arrives at the ideal layout of the orchard.

Photo: EFM