



RESEARCH & ADVICE IN AGRICULTURE & HORTICULTURE

ILVO

Flanders research institute for agriculture, fisheries and food

AGROFORESTRY
VLAANDEREN

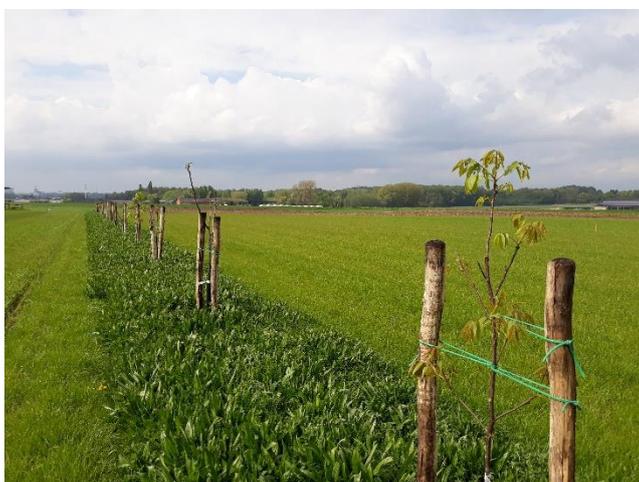
Experimental trial late Budding Walnut trees - BE

Walnut trees are often chosen as part of an agroforestry system in our region. Not only do they yield high quality wood, the walnuts themselves are the economic key component of the tree rows. More data and scientific research is needed to gain more insight into the production of walnuts in an agroforestry context and its economic value.

Walnut is a tree species that is gaining interest within the agroforestry context in Flanders: it provides an interesting product in the relatively short term. Moreover, it is characterized by the relatively late sprouting of its leaves compared to other species, which reduces the competition for light with annual crops. The time of sprouting or budding is a strongly variable characteristic depending on the variety, and can vary from March to the end of June. It is a measure for the risk of (night) frost damage and also partly determines the spreading of the harvest season and compatibility of varieties in terms of pollination. About 2% of all seedlings are late to very late.

Goals

On seven different locations in Belgium and The Netherlands, a total of 18 different walnut varieties (not yet registered) have been planted on experimental plots, both by growers and at research centers. The aim of this experiment is to compare the phenology, growth, health and ultimately the nut production and quality between these different cultivars in the long term. Among themselves as well as compared to reference varieties (commercial varieties).



Design

The design differs between plots. This trial was started at the beginning of 2021. The late budding varieties are called "LUW trees" (late budding walnut, or *Laat Uitlopende Walnoot* in Dutch). These are grafted specimens whose scion was collected from mother trees where this characteristic was found. All trees were grafted and grown at nursery "De Veredelde Walnoot" (NL). After thinning, at least one tree of each variety will remain.



Monitoring

The diameters of the trees are measured yearly. During the growing season, the trees are scored on their phase of leaf budding and male and female flowering at a weekly basis. Attention is also being paid to pests and diseases and the general performance of the different varieties.



More info?

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<https://www.agroforestryvlaanderen.be/nl/experimentele-sites>

