



Cultivation and Harvest of Walnuts in Germany: Suitable Varieties, System Design and Harvesting Techniques

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The wide variety of walnut cultivars, each with its unique characteristics, requires a well-considered selection before planting.

The cultivation of walnut trees (*Juglans regia*) has a long history in large parts of Europe including Germany since Roman times. Nowadays, walnuts are highly valued on the market, especially for their nutritious nuts and very durable hard timber. Incorporating them into agroforestry can boost profitability by 10 to 50%.

In Germany, demand for walnut products is increasing, but most are imported from other countries such as the USA and France. Currently, commercial walnut production remains limited to a few hundred hectares, largely due to overexploitation during the world wars. Therefore, the growing market appeal could open up new opportunities for regionally produced walnuts while also promoting ecosystem services.

However, an effective system design, suitable varieties and harvesting techniques are crucial for successful commercial production. Recommended German varieties include 'Kurmarker Walnuss', 'Ockerwitzer Lange', 'Seifersdorfer Runde' and the Geisenheimer varieties 'No. 26', 'No. 139' and 'Wunder von Monrepos'. In addition, popular varieties of foreign origin are 'Franquette', 'Lara' and 'Femor' (France), 'Scharsch' (American variety selection of Franquette), 'Broadview' (Canada) and 'Mars' (Czechia).

In agroforestry, walnuts are often planted in strips to optimize cultivation and harvestability. In most cases, 12-15 m distance between each tree seems advisable to improve sunlight exposure as well as airflow, while disease risk and competition are minimized.

Harvesting techniques include both manual and mechanical methods. The individual work steps include:

1. Shaking
2. Collection (e.g. by mechanical collection machines, mounted or hand-held devices)
3. Sorting

Provided that certain criteria are considered in advance, German agroforestry systems hold great potential for successful walnut cultivation!

**Daniel Fischer*, Ahmed
Manzim Ridwan*, Peter Zander***

Leibniz Centre for Agricultural Landscape
Research (ZALF) e.V., working group
"Agricultural Economics and Ecosystem
Services"



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