

Planting and Production Techniques for
Wild Foods and Aquatic Species

Planting and Seeding Rattan





1. Description

Calamus viminalis is a climbing rattan palm with slender stems up to 35 m long and 0.5–1.5 cm in diameter. It has pale green sheaths with spines, long leaves (1–1.5 m), and produces small fruits about 0.8 cm in size. **The young shoots** are eaten as a vegetable in Laos, while **the stems** are widely used for basketry, furniture, mats and traditional house construction. The species is native to South and Southeast Asia, including Laos, and grows in several forest and agricultural landscapes. It is classified as Least Concern on the **IUCN Red List** and is not considered invasive.

2. Seed collection and preparation:



2.1 Collection: Seeds should be collected when they are ripe. This is the case when:

- the **skin** colour changes from white to grey and black or red, and when it starts to crack
- the **flesh** turns dark and tastes sweet, tangy, and slightly sour.

2.2 Seed preparation:

- **Storage:** After collecting the rattan fruit, store it in a well-ventilated and shaded place. Do not allow the seeds to dry out, and avoid storing them for more than one month, as this can reduce germination rate.
- **Soaking:** After storage and before planting, remove the skin and pulp, then soak the seeds in water for about seven days to stimulate germination. Change the water daily.



Collecting rattan for breeding



Soaking

3. Planting

3.1 Preparing the land and Seeding: Loosen the soil by digging and let it dry in the sun. Raise the plot 10–20 cm above ground and size it about 1 × 4 meters to improve drainage and ease transplanting. Sow the soaked rattan seeds in the prepared plot, then cover with a layer of soil or sand to prevent the seeds from being washed away during watering or heavy rain.



Land preparation



3.2 Seeding on the pot: Moisten coconut husk, spread 5–10 cm in the pot, and sow the seeds evenly about 2 kg of rattan seeds per pot. Cover with another 5–10 cm of husk, wrap with plastic, tie tightly, and place in a shady spot.

3.3 Transplanting: Grow seedlings in the nursery for 8–12 months before planting. Stop fertilizing and remove shade nets 2 months before planting. Dig holes 30 × 30 × 30 cm, add 0.5 kg manure, place the seedling, and cover firmly with soil. Space holes 1–3 m apart, and plant near large trees if the rattan will use them to climb.



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4. Care and maintenance

4.1 Fertilizing: Every three months after planting, apply 1 kg of manure per plant or 200 g of fertilizer per plant using a 15-15-15 or 18-64-00 formula. Remove weeds around the plants and use the weed debris as mulch around the rattan base to help retain moisture.



Fertilizer

4.2 Watering: In the dry season, water rattan twice a week and use old leaves as mulch to retain moisture.



About the Series

The AFN II Practical Guides on Wild Foods and Aquatic Species are a series of brochures with solutions for land users, NGO staff, extension workers, or farmer associations. Brochures in the series focus on one of three aspects:

1. Planting and production techniques
2. Sustainable harvest & management
3. Essential tools and equipment

Authors and Funding

The series is prepared by the National Agriculture and Forestry Research Institute (NAFRI), Ministry of Agriculture and Environment, and the Centre for Development and Environment (CDE), University of Bern. It is developed as part of the Agriculture for Nutrition, phase II project funded by IFAD and GAFSP, and implemented by the Lao Government.

Find the information online: The brochures are all available digitally on the Pha Khao Lao Website (www.phakhaolao.la). Scan the QR code on the right to watch a video on the seeding and planting of rattan. More videos are available on the Pha Khao Lao YouTube Channel (**Phakhao Lao**)

