UNIVERSITY OF COPENHAGEN

Københavns Universitet

Seed collection methods - The easiest, simplest and safest way

Schmidt, Lars Holger

Published in:
Development Briefs. Technical

Publication date:
2021

Citation for published version (APA):
Schmidt, L. H. (2021). Seed collection methods - The easiest, simplest and safest way. *Development Briefs. Technical*, (14).

Download date: 17. Nov. 2026

DEVELOPMENT
BRIEFS
TECHNICAL
No. 14 - August 2021

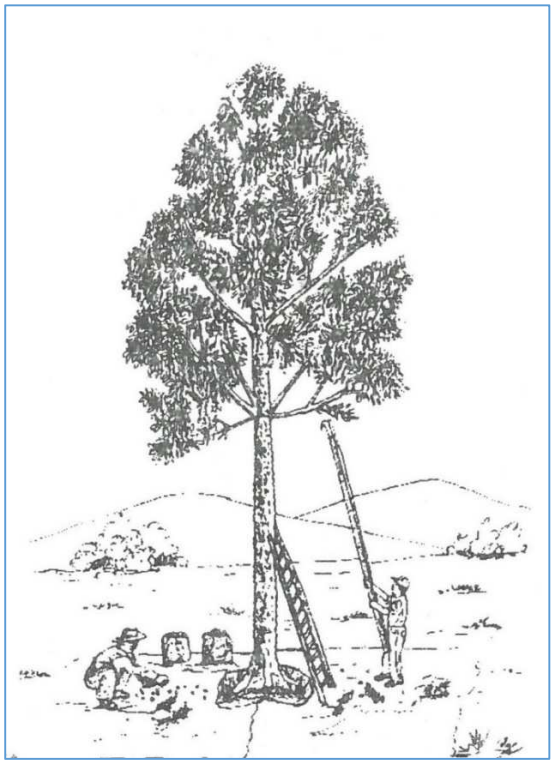
Seed collection methods – The easiest, simplest and safest way

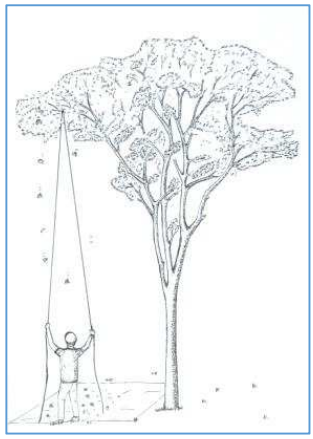
Chose the easy way

Generally, the easiest and simplest way applies as long as it doesn't compromise seed quality and as long as we can get enough good quality seed.

Collection from short trees

Bushes and short trees like most fodder species can be collected directly by plucking the fruits from branches when standing on the ground, bending down branches with help of a hook. Higher fruits may be reached by using some elevated platforms or ladders. Long handled tools or tools mounted on long poles can be used to tear off fruits or fruit bearing branches from a ground position. Pole mounted hooks and ropes thrown over fruit bearing branches, with the help of a throwbag can also be used to shake down fruits. It is advisable then to cover the ground with a tarpaulin to be able to pick up the fruits easily





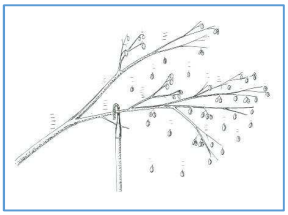


Figure 1. Shaking down fruits by the help of a throw-line or a pole-mounter hook. At maturity, the fruits and seeds are detached easily from the branchlets

Collection of fallen fruits from tall trees

This method is used if a substantial part of the fruits are shed and accumulated on the ground, and if they have a size that makes them easy to pick up manually. Sometimes a plastic sheet or tarpaulin placed on the ground in advance helps gathering the fruits. The method cannot be used if the fruits or seeds are easily lost by dispersal e.g. fleshy fruits removed by birds, if they germinate easily or are attacked by insects. Also not applicable for small fruits or seeds like eucalypts that easily blow far away and cannot be picked individually. If the ground underneath the trees is moist or filled with other plants, fallen seed may germinate immediately or be difficult to pick up.

Figure 2. Seeds on the ground are easy to pick up but are prone to deteriorate, be attached by insects or germinate.

UNIVERSITY OF COPENHAGEN

Collection by climbing

Tall trees whose fruits cannot be reached from the ground by the use of long handled tools must be climbed. Usually we use the tree trunk as support to get to the canopy. Various devices exist e.g. climbing spores. It takes a bit of skills to use them, and since the spores must be kicked into the tree trunk, they will inevitably damage the tree. However, usually the spur marks will heal up quickly and leave no lasting damage. Once reaching the canopy, the collector makes his / her further way to the fruit bearing branches by climbing the branches. Long handled tools can be used to tear off fruits or fruit bearing branchlets. Climbing and especially working in the canopy is potentially dangerous, and climbers should always be secured from fall by using safety ropes, preferably professional safety gear which should be made available to climbers by e.g. seed centres.

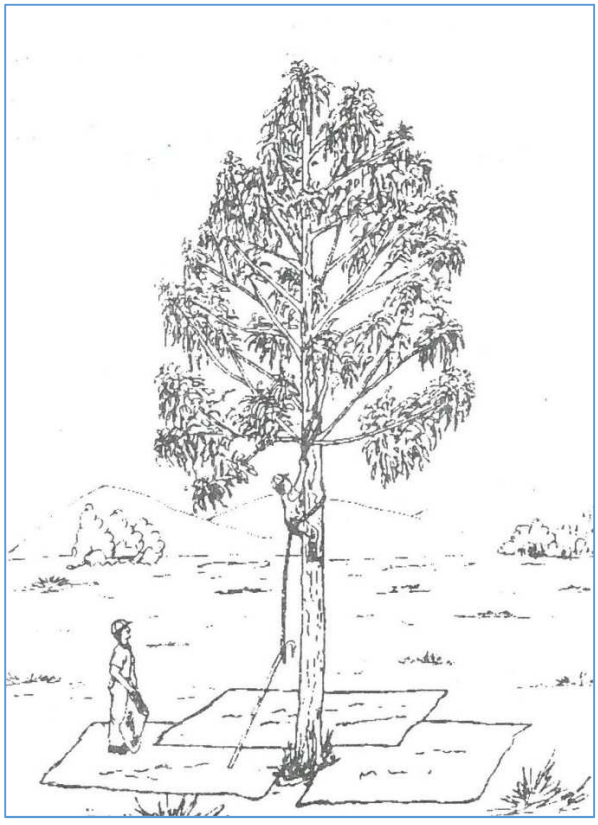


Figure 3. There are numerous ways of climbing vertical trunks, e.g. by spurs, advanced lines, ladders or tree bicycles

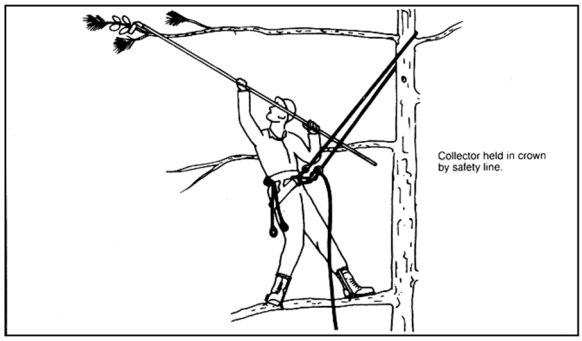


Figure 4. Harvesting fruits from the canopy requires that the collector are safely attached to the tree and have both hands free for collection work.

Collection from felled trees

When tall trees are to be cut down for timber, it is sometimes possible to coordinate with the owner to time cutting with seed collection time and in this way get access to fruits without climbing

Summary, do's and don'ts

Do

- Use appropriate safety measures and equipment when climbing trees
- Always be two together when climbing, in case of accidents

Don't

- Don't damage trees unnecessarily during collection
- Don't cut down trees only for seed collection

Selected readings

Trujillo, E 1996. Manejo de semillas forestales. CATIE, Costa Rica

Schmidt, LH 2000. Guide to handling of tropical and subtropical tree seed. Danida

Forest Seed Centre, Denmark.

Schmidt L. 2007. Tropical Tree Seed. Springer. Heidelberg, Berlin

US Agriculture. **National Tree Climbing Guide.** https://www.fs.fed.us/treeclimbing/policy/2015_04_22NTCGweb.pdf

Author: Lars Schmidt

This Development Brief was written as an extension note for PATSPO project, Ethiopia