

Sustainable Harvest and Management of
Wild Foods and Aquatic Species

Smooth Ball Mushrooms



1. Description

Smooth Ball Mushrooms are small terrestrial fungi. Young mushrooms are round (2–3 cm wide) and split into **3–9 star-shaped petals** when they mature. It is an **edible** wild mushroom used in soups, stir-fries, and curries. It is also used in **traditional medicine**. The species grows in **dry dipterocarp forests** in Asia, including Laos. It is classified as a **Least Concern species** on the IUCN Red List of Threatened Species.

2. Key Identification Features:

- **Shape:** Spherical, with a smooth, intact outer wall.
- **Size:** Typically 1.5 to 3.5 cm in diameter.
- **Color:** Usually brownish or earth-colored, blending with forest ground.
- **Distinct Features:** When mature, the outer wall splits open into star-like rays, revealing the spore mass inside.
- **Habitat:** Grows on forest floors, often in soil rich in organic matter, within both coniferous and broadleaf forests.



Important: Only harvest mature specimens when the outer star has fully opened to ensure spore dispersal and sustainable growth.

3. Habitat preservation

Village groups should manage forest areas where wild mushrooms grow and set up community reserves for sustainable harvesting. All villagers must follow these rules fairly. Village groups should meet twice a year: before the season to plan the harvest and discuss the pricing, and after the season to review the season's results and make improvements. This ensures mushrooms are harvested sustainably and benefits are shared equitably.

4. Harvesting & Management Practices:

4. 1 Sustainable Harvesting:

- **Select mature fungi:** Wait until the outer wall has fully opened into a star shape. This ensures spores are released naturally, promoting regeneration.
- **Limit quantities:** Harvest only what is needed for consumption or sale, avoiding overharvesting that damages the fungi population.
- **Avoid damaging the substrate:** Be gentle with the surrounding soil and plant roots to preserve the environment for future growth.

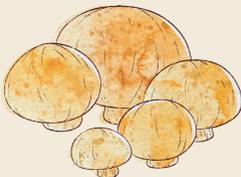
4. 2 Managing Forest Impact:

- **Minimize soil disturbance:** Harvest fungi without uprooting or damaging the soil substrate.
- **Respect the habitat:** Avoid harvesting during wet or vulnerable periods to reduce ecological disturbance.
- **Monitor local populations:** Keep records of harvested quantities and locations to track sustainability over time.



4. 3 Tools & Techniques:

- Use small, sharp knives or scissors for careful harvesting.
- Collect only mature specimens, leaving immature ones to mature and reproduce.



5. Promoting Community & Ecosystem Sustainability

5.1 Community Involvement:

- Educate community members about identifying mature Smooth Ball Mushrooms correctly.
- Promote responsible harvesting as part of traditional knowledge and sustainable use practices.
- Encourage local discussion on harvest limits and ecological impacts.

5.2 Ecosystem Benefits:

- The Smooth Ball Mushroom in spore dispersal, aiding in forest regeneration.
- Responsible harvesting supports biodiversity and forest health, ensuring future availability of wild foods.



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

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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 Sustainable Harvest of Smooth Ball Mushrooms. More videos are available on the Pha Khao Lao YouTube Channel (**Phakhao Lao**)

