



norden

**INFORMATION
ON POTENTIAL
DEADLY MISTAKES**

between Paddy Straw Mushroom cultivated in *Southeast Asia* and deadly poisonous mushrooms growing wild in the Nordic countries



Deathcap young



Paddy Straw Mushroom young

Warning

Especially for Southeast Asian people in the Nordic countries collecting and eating a mushroom which they believe is Paddy Straw Mushroom (Straw Mushroom). Paddy Straw Mushroom does not grow wild in the Nordic countries.

Which mushrooms?

Eating by mistake the deadly poisonous mushrooms: Deathcap or Destroying Angel instead of the edible Paddy Straw Mushroom may be disastrous. These mistakes have resulted in a number of serious poisonings in the Nordic countries, including very serious liver damage and in several cases death. Many of these poisonings, including fatal cases, have been registered among Southeast Asian immigrants or visitors in the Nordic countries.

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Poisoning with Deathcap and Destroying Angel

Deathcap and Destroying Angel are among the most dangerous poisonous mushrooms in the world. Ingestion of a single fruit body may lead to death.

The poisoning may typically have three phases:

1. The first phase, beginning 6–24 hours after consumption of the poisonous mushrooms, is characterized by violent, long-persistent diarrhoea, nausea, vomiting and abdominal pain. Duration 12–24 hours.
2. Sometimes followed by a temporary second phase with apparent recovery
3. The last phase starts 2–6 days after the consumption, with more or less severe symptoms of liver and possibly kidney damages, which may lead to death.

Deathcap

(Amanita phalloides)

Deathcap is deadly poisonous and considered as the most dangerous mushroom in the world. It is more or less common in the southern parts of the Nordic countries (not found (yet) in Iceland), growing under deciduous trees primarily Beach and Oak in woods and parks.

Immature fruit bodies are like Paddy Straw Mushroom and Destroying Angel covered by a whitish

veil (“skin-like membrane”) and look like small hen’s eggs.

The more mature mushroom has a greenish to olive green cap and a whitish to pale greenish stem with a zig-zag pattern and white ring. It has a whitish veil (“sac”) around the bulbous base of the stem. It has white gills and spore print.

Paddy Straw Mushroom

(Volvariella volvacea)

Paddy Straw Mushroom is widely cultivated in Asia, especially in Southeast Asia and extensively used in the Asian cuisine. It is extremely rare in the Nordic countries, where it may be found as introduced on compost.

The immature fruit bodies completely covered with a veil (“skin-like membrane”) are very difficult to distinguish from the two poisonous mushrooms Deathcap and Destroying Angel.

The more mature fruit bodies of Paddy Straw Mushrooms have a greyish to brownish cap and a whitish stem, widened at the base and have, like the two poisonous mushrooms, a whitish to brownish volva (“sac”) at the extended or bulbous stem base.

However, the more mature Paddy Straw Mushroom has pink, later pinkish-brown gills and spore prints and no ring on the stem – whereas the Deathcap and Destroying Angel have white gills and spore prints and a ring on the stem.



Mature Paddy Straw Mushroom



Paddy Straw Mushroom (“eggs”) and mature Paddy Straw Mushroom





Deathcap ("eggs")



Mature Deathcap



Destroying Angel (*Amanita virosa*)

Destroying Angel is as deadly toxic as the Deathcap. It is less common in Denmark, common in the southern part of Finland, Norway and Sweden, but not found in Iceland (yet). It grows both in deciduous and coniferous forests.

The immature fruit bodies are like Paddy Straw Mushroom and Deathcap covered by a white veil ("skin-like membrane") and look like small hen's eggs.

The mature Destroying Angel has a white cap and stem. The white stem is floccose and has a white ring and provided with a volva ("sac") surrounding the bulbous base of the stem. It has white to cream gills and white spore print.



Destroying Angel ("eggs")



Mature Destroying Angel



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What to do if suspicion of mushroom poisoning?

In case of suspected mushroom poisoning. Poison Information Centre, doctor or hospital must be contacted **immediately**.

In acute cases, follow the first aid instructions given by the Poison Information Centre, doctor or hospital.

On suspicion of mushroom poisoning, it is important to bring any remnants of the raw mushroom, residues of the mushroom dish and/or vomit, so mushroom species can be identified by experts and the necessary medical treatment can start as soon as possible.

Information on possible mushroom poisoning can be obtained from one of the National Poison Information Centers or calling Emergency:

Denmark

Giftlinien

Phone +45 82 12 12 12

Emergency 112

<http://www.bispebjerghospital.dk/giftlinjen/forside>

Finland

Myrkytystietokeskus

<http://www.hus.fi/default.asp?path=1,28,824,2049,2265,2260>

Giftinformationscentralen

Phone + 358 9 47 19 77

Emergency 112

<http://www.hus.fi/default.asp?path=58;3739738;7645&voucher=08E363E4-AA33-4DB7-B70D-9AA25BF9728E>

Iceland

Eitrunarmiðstöð

Phone +354 543 2222

Emergency 112

<http://www.landspitali.is/eitrunarmidstod>

Norway

Giftinformasjonen

Phone +47 22 59 13 00

Emergency 113

www.giftinfo.no

Sweden

Giftinformationscentralen

Phone +46 (0)8 33 12 31

Emergency 112

<http://www.giftinformation.se/>

Treatment of poisoning

There is no efficient antidote known to the toxins in these poisonous mushrooms, but symptomatic and rather empirical treatments may be successful. The more immediately you react after a mushroom poisoning, the more successful will the treatment be.

Irrespective of thorough medical treatment several poisoned persons may need liver transplantation – in some cases in vain.

General advices on safe use of mushrooms

- Eat only mushrooms, which you are 100% sure that you recognize
- Eat only mushrooms, which are generally recognized as edible
- Do not eat spoiled mushrooms
- When eating a new species of mushrooms for the first time, always start up with a small portion in order to minimize the risk for allergy or other hypersensitivity reactions
- Do not eat mushrooms raw, as many mushrooms may cause discomfort if eaten raw, e.g., stomach pain or nausea.

Especially for foreigners collecting mushrooms in the Nordic countries

- Learn carefully about the mushrooms in the Nordic countries,
 - they may look like some edible mushrooms in your home country, but can be deadly poisonous.

Why mistakes?

Immature (young) fruit bodies of Paddy Straw Mushroom are, like young fruit bodies of Deathcap and Destroying Angel covered by a whitish or pale greyish universal veil (“skin-like membrane”) and may resemble small hen’s eggs. Therefore, at this stage of maturity the edible Paddy Straw Mushroom can quite easily be mistaken for the deadly poisonous Deathcap and Destroying Angel, and if collected and consumed may result in serious poisonings.

The more mature Paddy Straw Mushroom is also mistaken for the two poisonous mushrooms at their mature stages, especially because all three mushrooms have a characteristic volva (“sac”) around the extended/bulbous base of their stems.

Further reasons for the potential fatal mistakes are:

- The Deathcap and Destroying Angel are more or less common wild mushrooms in parts of the Nordic countries (not (yet) in Iceland) but are not commonly found in Southeast Asia
- Paddy Straw Mushroom is widely cultivated in Southeast Asia but is only seen as imported, cultivated, dried or canned mushrooms in the Nordic countries. Paddy Straw Mushroom does not grow wild in the Nordic countries.

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