

Guide to identifying *Arcyria incarnata*



1. Macroscopic Identification

Crowded clusters of tiny, pink, candy floss-like cylinders on rotting wood (lignivorous).

- Colour: Fresh: Bright rose-pink, flesh-coloured, or crimson; aged: fades to dull brown or ochre as spores are released.
- Sporangia (Heads): Cylindrical to ovoid (egg-shaped), typically 1–2 mm tall.
- Stalk (Stipe): Very short (0.1–0.3 mm) and weak. Often looks nearly sessile (sitting almost directly on the wood), unlike other *Arcyria* species that have distinct, long stalks.

The "Blow Test" (Crucial Diagnostic)

This is the most effective non-microscopic way to distinguish *A. incarnata* from its look-alikes.

- The network of threads holding the spores (capillitium) is very loose and elastic. If you gently blow on a mature specimen or touch it lightly, the pink cottony mass will easily expand and often detach completely from the cup (calyculus) at the base, or remain attached only by a tiny central point.
- Contrast: In similar species like *Arcyria denudata*, the capillitium remains firmly attached to the cup and does not blow away easily



2. Microscopic Identification

For a definitive ID, you must examine the capillitium and attachment points under a microscope.

Feature	Characteristics
Capillitium	A network of branching threads (3–5 µm wide). Pale pink. Decorated with sharp cogs, half-rings, or spines (often in a spiral).
Attachment	Key Feature: The capillitium is attached to the basal cup (calyculus) only at the very center. There is no attachment at the margins/sides of the cup.
Calyculus (Cup)	The shallow cup left behind after the spores disperse is smooth or has faint ridges/warts on the inside.
Spores	6–8 µm in diameter. Pale pink in mass, colourless individually. Marked with a few scattered, faint warts.

3. Habitat & Season

- Almost exclusively on damp, rotting wood (logs, stumps, fallen branches); favours broadleaf (deciduous) wood but can occur on conifers. Most common from late spring to autumn. Like many slime molds, it appears frequently after periods of rain.

4. Distinguishing similar species

The most common confusion is with *Arcyria denudata*.

Feature	<i>Arcyria incarnata</i>	<i>Arcyria denudata</i>
Color	Pink/Flesh-colored	Bright Red / Brick Red
Stalk	Very short, weak	Distinct, longer, rigid
Capillitium	Loosely attached (falls away easily)	Firmly attached to the whole cup surface
Persistence	Ephemeral (blows away)	Persistent (stays red and fluffy for longer)