

Moss identification guide

Stair-step moss *Hylocomium splendens*

Description

Stair-step moss appears “fern-like” with many small branches covered in more tiny branches. It ranges from 5-20 cm long. Each year’s growth emerges from the top of the previous year’s growth at a 90° angle – just like stair steps! Its colour ranges from yellow-green to olive green with a red stem.



Photo: Wikipedia commons



Photo: Phaedra Cowden

Where to find it

Colonies can be found growing in loose mats on the ground, on downed trees or rocks.

A stair-step moss “beard” growing on a stone wall.



Photo: Phaedra Cowden

Gallery

Have a look at a few different images. Sometimes mosses can look a bit different depending on their growth conditions! The iNaturalist page has lots of additional images.



Photo : Martine Lapointe (Société québécoise de bryologie)



Photo : Mélanie Jean

Arctic and alpine growth

In arctic and alpine regions, this moss lacks the stair-step growth form and instead grows in a single erect stem (which is an adaptation to the harsher climates typical to these regions).



Photo: Phaedra Cowden

Impostor

Thuidium delicatulum

Watch out for the similar-looking fern moss: However, the fern moss:

- Does not grow in the stair step growth form
- Does not have a red stem



Photo: Wikimedia Commons

Fern moss

Red-stemmed feather moss

Pleurozium schreberi

Description

Red-stemmed feather moss has branches that emerge at right angles from the main stem, giving this moss a “feather” like appearance. It can grow up to 16 cm in length.

Colour ranges from light green to yellowish. Bright red-orange stems are distinctly visible when the moss is wet.



Photo: Mélanie Jean

It often grows in dense carpets.



Photo: Phaedra Cowden

It looks like a feather.



Photo: Phaedra Cowden

Red-stemmed feather moss carpet on the forest-floor.

Where to find it

Colonies form carpets over large areas and have a “shag carpet” appearance or can grow in smaller clumps among other mosses or grasses.

Gallery

Have a look at a few different images. Sometimes mosses can look a bit different depending on their growth conditions! The iNaturalist page has lots of additional images.

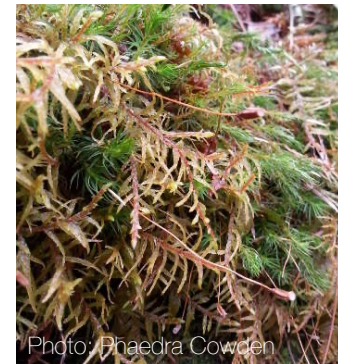


Photo: Phaedra Cowden



Photo: Wikimedia Commons



Photo: Tanner Liang

When the moss is wet, the red stems are visible. It is harder to see when the moss is very dry.

Impostors

Callicladium haldanianum

Watch out for the similar-looking sword moss:

However, the sword moss:

- Has loosely overlapping leaves giving it a spiky appearance
- Does not have a red stem



Photo: Wikimedia Commons

Calliergonella cuspidata

Watch out for the similar-looking spear moss:

However, the spear moss:

- Grows only in wetlands
- Does not have a red stem

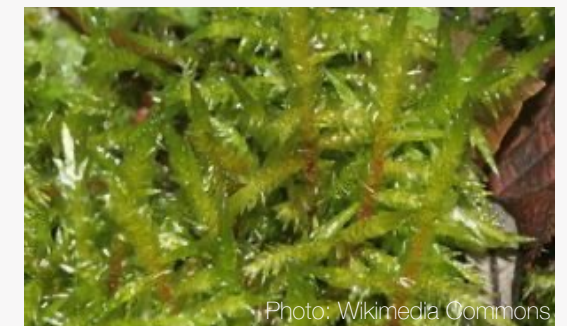


Photo: Wikimedia Commons