

## Bog Moss

### Species of genus *Sphagnum*



Did you know that Bog moss can soak up as much as 20 times its own weight in water? There are about 120 species of Bog Moss, with over 20 species found in Ireland. They are the main building block of Ireland's bogs, support incredible amount of biodiversity and, after the world's oceans, are the most important carbon sink on earth.

Peat moss can be distinguished from other moss species by its unique branch clusters. The plant and stem colour, the shape of the branch and stem leaves, and the shape of the green cells are all characteristics used to identify peat moss to species.

*Sphagnum* mosses produce fruiting bodies called capsules. When they are ripe, pressure builds up in the capsule, its lid is blown off and tiny spores are released into the water. These then form new moss plants.

The tip of the moss grow continuously upwards and the parts of the plant underneath do not decompose because the organisms that decompose plants cannot live in bog conditions. This build up of moss after time turns into a type of soil which is called peat and this process over thousands of years forms the peatlands we have today. Some *Sphagnum* mosses grow tightly packed together to form hummocks or cushions that can be meters high!

Bog moss act like a sponge and soaks up as much as 20 times its own weight in water. The water is stored between plants that grow together in cushions and it is also stored in special cells inside the leaves. The plant absorbs all of the nutrients found in rainfall by exchanging them for acidic Hydrogen ions.

*Sphagnum* mosses have been used by man for various purposes throughout the history, including dressing for wounds, preservation of food, gardening...

Europe has a long history of the exploitation of peatlands and only now realises how unsustainable this practice is. We would like to encourage everybody to buy peat-free products where possible. The market will thrive as long as there is demand. We, consumers, can influence the market by making a sustainable choice every-time we go shopping.