

Peat moss of Estonian origin

Peat moss is dead fibrous plant material that forms when mosses and other plants partly or completely decompose in peat bogs. On the whole 90% of the plant matter in bogs is made up of Sphagnum moss, which makes the composition of peat very homogenous. The cells of Sphagnum moss have a huge water-holding capacity.

Advantages of peat moss

Free of weeds, insects, and diseases.

Peat acts like a sponge absorbing water and nutrients and releasing them as needed. This feature is described as soil buffering capacity. It is the ability of soil to stop nutrient or pH changes by absorption.

Peat moss also has great air porosity which is inevitable to ensure enough air delivered to the plant roots. Due to the physical and chemical properties, peat ensures optimal growth of roots, providing adequate air and water for the plant's later growth.

Sphagnum peat moss has disease suppressive qualities against certain root-rot pathogens due to their synthesis of antibiotics. Sphagnum peat moss contain many microorganisms including Penicillium, Trichoderma, Mucor, Mortierella etc. These beneficial microorganisms suppress the root rot pathogen populations through competition; therefore, it is difficult for root rot organisms to establish in the Sphagnum peat based growing mixes.

White, fibrous peat from the surface of the bog has higher microbial populations than the darker, more decomposed peat from deeper layers in the bog.

Popular soil revision

Peat moss is a very popular soil revision due its ability to help sandy soil retain moisture and nutrients and adding more substance and body to sandy soil.

In case of heavy clay soil, it helps to loosen it up, which allows proper healthy root growth and better drainage to aid the plant's root system and absorb nutrients, water as well as oxygen.

Because peat moss has naturally low pH of about 3,5-5, it is also an excellent soil amendment for acid-loving plants or for high alkaline areas.

Difference of white and black peat

The major difference between black and white peat lies in the decomposition level and density. Decomposition level shows how decomposed the sphagnum particles are. Black peat lies in the lower, thus also older part of bog and is more decomposed than the white peat, that is in upper part of bogs and younger.

Black peat has better water retention capacity than white peat.

The wettability of black peat is faster than the wettability of white peat.

In white peat there are more fibres, in black peat there is no visible moss.

The organic matter content is a higher in white peat than in black peat.

Microflora content is higher in white peat than in black peat.

Higher air porosity in white peat.

Density of black peat substrate is higher, ca 300-320kg/cbm

The density of white peat is around 140-190kg/cbm

Peat substrates MKS0, MKS1, MKS11, MXL contain of 100% white peat.

In our black peat substrate MPS1 there is 70% of black peat and 30% of white peat.