

## Analysis of the Life Cycle

This fact sheet shows the results of the life cycle analysis. The greenhouse gas emissions have been analysed and evaluated.

## Product Information

The following potting soils of the Ricoter assortment were analysed:



### Formulation 111

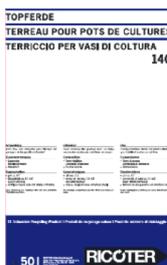
Potting soil for geranium without peat (field soil, bark compost, wood fibres, mineral fertiliser)

### Formulation 111

Potting soil for roses without peat (field soil, bark compost, wood fibres, mineral fertiliser)

### Formulation 184\*

Potting soil Bio-Line for balcony plants and herbs (field soil, garden compost, wood fibres, Cocopeat, organic fertiliser)



### Formulation 105\*\*

Potting soil for flowers without peat (field soil, bark compost, wood fibres, mineral fertiliser)

### Formulation 140

Potting soil (field soil, bark compost, white peat)

### Universal potting soil

100% peat

\*more Bio-Line products with similar composition as Formulation 184/ \*\* products similar to formulation 111

**Functional Unite:** 1 Liter of potting soil

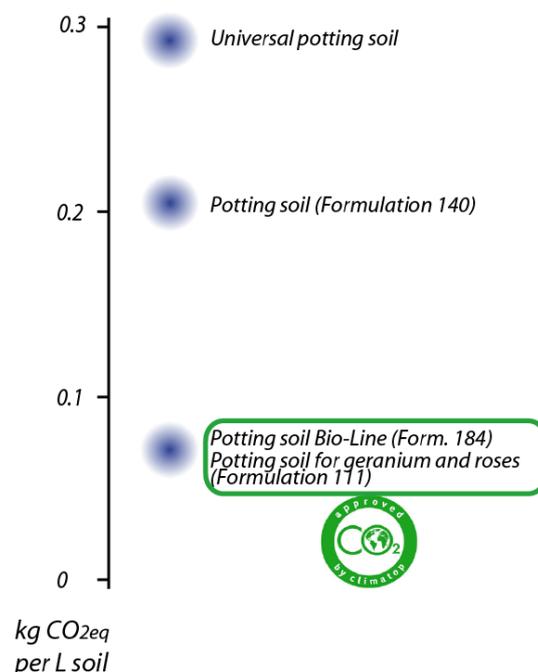
## The Comparison

The greenhouse gas emissions (expressed in CO<sub>2</sub> equivalents) were summed up over the whole life cycle of the potting soils, i.e. from the supply of the raw material to the production and transportation through to the waste disposal of the packaging.

## The climatop Certification

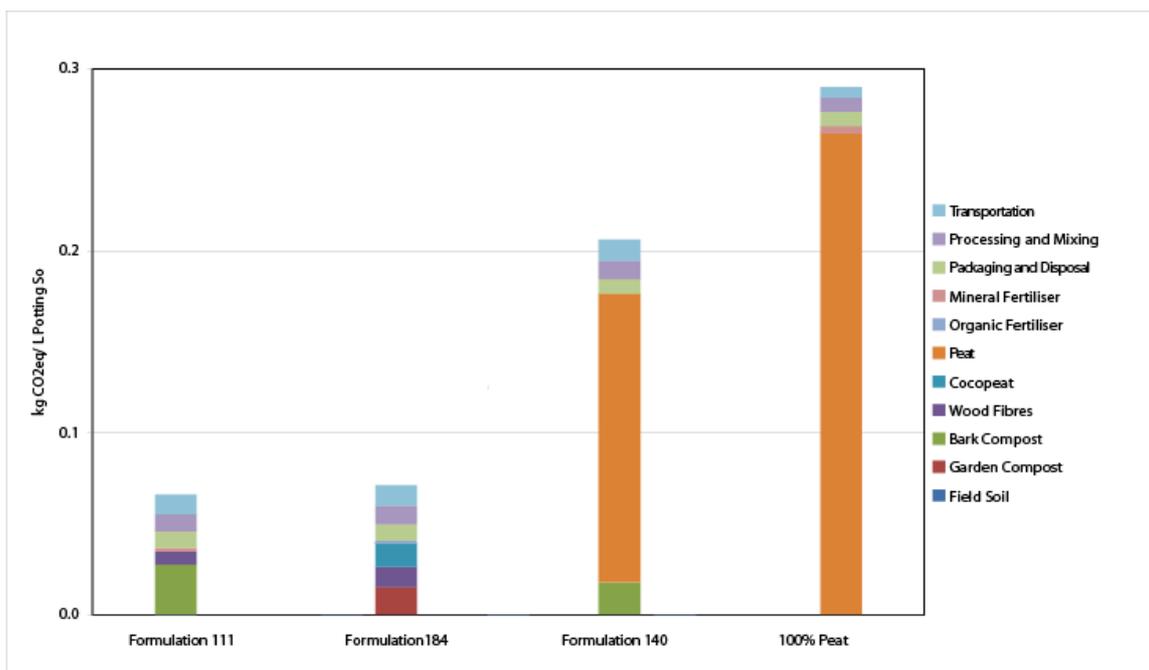
This balance includes potting soils. Due to innovations, the potting soil with composition 184 (as well as 175 and 106) and the potting soils for geranium and roses without peat with composition 111 (as well as potting soil for flowers with composition 105) are certified as climatop-Champions.

**Validity:** until 01/09/2014



## Results

The product comparison showed that the formulations 111 and 184 as well as 175 and 106 (all formulations without peat) cause the conspicuously lowest emissions. The climate impact was more than three times lower than the impact from other potting soils. The production of those potting soils is primarily based on organic waste material, such as compost, wood fibres, as well as soil that derives from the washing of sugar beet. Therefore these soils cause low emissions. However, the higher the fraction of peat in potting soils is, the higher are the caused climate relevant emissions. This is due to the high fraction of carbon (up to 50% by weight) that has accumulated in the peat during thousands of years and which is discharged into the atmosphere after the harvest of this peat.



In formulation 111 and 184 the fraction of compost (bark or garden compost) is responsible for the largest part of greenhouse gas emissions; in the other potting soil formulations containing peat, the peat fraction is responsible for the largest part of emissions. The production of the potting soils per se, the packaging and the transportation are only responsible for a small part of the total climate charge. For formulation 111 and 184, these emissions are a bit more relevant, whilst for the formulations with peat their influence is marginal.

### Peat free soil: Good for nature conservancy as well

To renounce the use of peat containing soil is not only good for the climate, it is also good for nature conservancy: Peat comes from wetlands where rare and endangered animal and plant species can be found. Peatlands are also good water reservoirs. They are like giant sponges that are able to absorb huge amounts of water and that release the water slowly. This helps to prevent flooding. In addition, they are natural water filters and because of their unique flora and fauna they have also a high value as recreation area for the population. Peatlands are wet habitats. The continuous water excess from precipitation or soil water leads to a lack of oxygen. Therefore dead plant material is incompletely degraded and deposited as peat. With the harvesting of peat, which requires drainage to make the area accessible for machines, those wetlands are sparsely destroyed. Because of their slow accretion and the severe manipulation that such drainage means for the lands, they can usually not be recovered.