

- Exclusively by columbus: filter bags made of fleece material classified filter class M and pretreated with "Bioneem" for antiallergical application.
- 100 % filling capacity, optimal suction power and high air volume.
- The cover flag secures a hygienic disposal of used bags.
- The natural agent "Bioneem" counteracts like an "invisible barrier" against all allergenes.
- Mite excrements and other microscopical allergenes are trapped in the fleece bag. The exhaust air is hygienically clean.
- () "Bioneem" keeps its effectivness as long as the fleece bag is in use.
- "Bioneem" fleece bags with 7 or 11 litres volume are available for the columbus vacuum cleaner series ST 7 and ST 11 in packing units of 20 pieces each.





# BIONEEM-FLEECE FILTER BAGS.

ST 7 ST 11

## bioneem







Neem tree

Neem leaves with fruits and blossoms

#### Neem tree

The neem tree, or margosa tree, is already mentioned as a miracle tree in 4500 year old Indian documents. Translated from Sanskrit (old Indian language, approx. 1200 B.C.), "neem" means one who gives salvation or relieves an illness. It is still honoured today as a "village pharmacy".

The neem tree originated in South West India, Pakistan and Burma. Today, a large number of neem trees are grown in almost all tropical and subtropical areas of the world. Neem trees are fast-growing, broad-leaved trees which reach a height of up to 40 metres and form 20 metres wide crowns under dry and hot tropical conditions. They can live for up to 200 years. Its botanical name is "Azadirachta indica" and it belongs to the family of mahogany plants (Meliaceae).

### Ingredients

Many of the active ingredients of the neem tree have not been completely investigated yet. Neem contains more than 100 different chemical ingredients which, moreover, vary in the trunk, bark, leaves and fruits and are very complex. Azadirachtin is a very important ingredient which has an insecticidal effect. It is extracted from neem oil, which is pressed from the tree's seeds. Further important ingredients are salannin, meliantriol, nimbin and nimbidin.

#### The characteristic effect of BIONEEM

Margosa extract contains a number of different biologically effective substances. The most important group of ingredients – along with the oil components – are the limonoids.

The high biological effectivity of margosa extract is characterised by distinctive repellent features. The natural bitter substances contained in the extract also denature the food source (danders) of house dust mites and make it inedible. The lack of food leads the mites to avoid or leave the textiles concerned in order to look for food elsewhere. The lack of food in itself sustainably affects the egg deposition and reproduction.

