Insects like thrips and whiteflies infest and damage pepper plants.

> NORTH AMERICA

The pepper species includes, for example sweet peppers, chilli peppers and jalapeño peppers.

PEPPERS

1

Pepper plants belong to the nightshade family. The commercial value of peppers amounts to approximately 500 million dollars per year. These plants are however susceptible to various insect pests like thrips and whiteflies that can cause substantial crop damage and, consequently, commercial losses.

Free Pepper – **How a Natural Pepper Became a Patented Plant**

On May 8, 2013 the European Patent Office (EPO) granted a patent on conventionally bred insect resistant pepper plants to Syngenta, the world's biggest agrochemical company. Such patents negatively impact further innovation. Therefore, a broad coalition filed an opposition to this patent in February 2014.

Resistant wild pepper plant

IAMAICA

In Jamaica, a wild pepper plant exists that is resistant to thrips and whiteflies. In the 1970s, University of California Professor Paul G. Smith brought the plant to the United States.

THE NETHERLANDS

From the University of California, the wild pepper came to the Centre for Genetic Resources, the Netherlands (CGN), the Dutch seed bank, in 1976.

SOUTH AMERICA

The wild

pepper plant

SYNGENTA Syngenta received the wild pepper

from CGN and started to use it for breeding in about 2002. The company crossed the wild pepper plant with commercial pepper plants. The desired trait - insect resistance could be specifically selected by means of SMART breeding. This is a conventional breeding method based on crossing and selection, supported by technical means. The resulting commercial pepper is resistant to whiteflies.



OPPOSITION

In February 2014, a broad coalition of NGOs and farmers' and breeders' organisations, filed an opposition to the patent at the EPO, stating that Syngenta did not invent the resistance, since it already existed in nature and novelty cannot be claimed.

Such patents are not only questionable from an ethical point of view. They also: aggravate the concentration process within the seed market, have a negative impact on innovation, and pose a risk to food security.



PATENT APLICATION

In 2008, Syngenta filed a patent application at the EPO, claiming exclusive rights to all peppers resistant to whiteflies. Five years later the firm was granted the patent, which is now valid across Europe. This means that farmers and breeders are no longer allowed to use these peppers for further breeding.

> The patent was granted on May 8, 2013, by the EPO.

A single patent application enables Syngenta to hold the patent in 38

Susceptible commercial pepper plant

5

2 140 023 B1

Resistant commercial pepper plant no patents on seeds

BD Berne Declaration Déclaration de Berne Erklärung von Bern

SWISSAID 静

