

Pine forests falling victim to beekeepers' initiative

By Pandelis Houlakis - Kathimerini 09/05/2005

A pine tree covered in the secretion of Marchalina hellenica. The insect lives off the sap of the tree, producing a white fluff, which bees feed on to produce honey.

HANIA - All over Greece, pine trees are being desiccated because of the introduction by beekeepers of large numbers of an insect whose secretions bees feed on to make honey.

The latest victims of the insect (*Marchalina hellenica*) are the pine forests in the prefecture of Hania on the island of Crete and in the island's Samaria Gorge to the south.

According to Hania Prefecture Forestry Director Vassilis Kasiotakis, this infestation occurred with the blessing of the Ministry for Agricultural Development.

The first dead pines were found in forests above Anopoli and Aghios Ioannis in the early 1990s. Kasiotakis said that even then the problem had been attributed to the insects, known to the local beekeepers as "workers."

Yet in March 2001, the Animal Produce General Directorate's beekeeping department at the Agriculture Ministry (as it was then known) wrote to local authorities "encouraging" them to introduce the insects into the pine forests.

It actually funded beekeeping associations through the EU's Third Community Support Framework to the tune of 4,000 drachmas (11.70 euros) per 0.10 hectares without first evaluating the climatological conditions in the area and any future negative effects on the ecosystem. As a result, the population of this parasite multiplied dramatically and spread to pines and cypress trees in forests around the region.

"What they actually did was to fund the beekeepers's associations to deliberately infest the pine forests," said Kasiotakis.

"These forests exist in extreme ecological conditions since there is very little water, due to an extended dry period (of up to eight months) and sudden deluges in winter," he explained. "This is a serious problem, as the existence of a parasite such as *Marchalina hellenica* maximizes the risks to the forest, as it sucks the sap from the tree in order to survive, thereby weakening the tree. If one adds to that the damage done by the processional caterpillar, then the risks are great indeed."

Parts of the Hania prefecture where the problem has assumed major dimensions are around Anopoli and Aghios Ioannis, at Prasse north of the White Mountains, at Aghii Apostoli and within the national park of the Samaria Gorge.

According to Kasiotakis, a survey carried out four years ago by the Institute for Forestry Research found that the pines had been affected by a number of species of nematodes, worms that live in the soil and attack the roots of the trees. Scientists from the Benaki Phytopathology institute, who took soil samples for further analysis, said these nematodes had been found in forests in Attica where *Marchalina hellenica* had also been found in large numbers.

The problem appears to lie in the fact that it is extremely difficult, if not impossible, to eradicate this insect using the means permitted by the European Union. In 1996, the Italian government passed a special law on the eradication of *Marchalina hellenica* and spent large sums for the purpose, yet Greece has done just the opposite.

According to a document from the Institute for Mediterranean Forestry Ecosystems and Forestry Product Technology at the National Agricultural Research Foundation (ETHIAGE), this occurred because of “incompetence and insufficient knowledge on the part of those responsible for the program, who had no idea of the harm the insect could cause, and who approved and encouraged the spread of the insect populations with funds from the Greek state.”

So these huge populations of *Marchalina hellenica* that have spread throughout the prefecture of Hania can no longer be controlled and are continuing on their path of destruction — and all this in order to increase the amount of honey produced.

The authorities cannot estimate the magnitude of the destruction, but it is certain that the extent of the destruction is enormous, particularly in the National Park of Samaria.

The Hania Forestry Department has issued a document calling the presence of the insect in the Samaria gorge a “danger to the structure and operation of the ecosystem” and that because of the rate at which it multiplies, the trees will be destroyed at the same rate, threatening the economy of the island.

The department recommends an awareness campaign along with on-the-spot evaluation by experts.