

Climatic Effects on Honey Bee Health in Turkey between in 2007 and 2008

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In Turkey, Beekeeping industry has a big potential for the Turkish economy. On the other hand, there were some problems with colonies between the years 2006-2007. Colony losses were observed in different regions of Turkey and occurred sometimes gradually, sometimes suddenly. Though colony losses rates were 15-20% in 2006, 28.7 % in 2007, the data of 2008 were very different from the last two years. Colony losses rate was 1.8% surprisingly in 2008

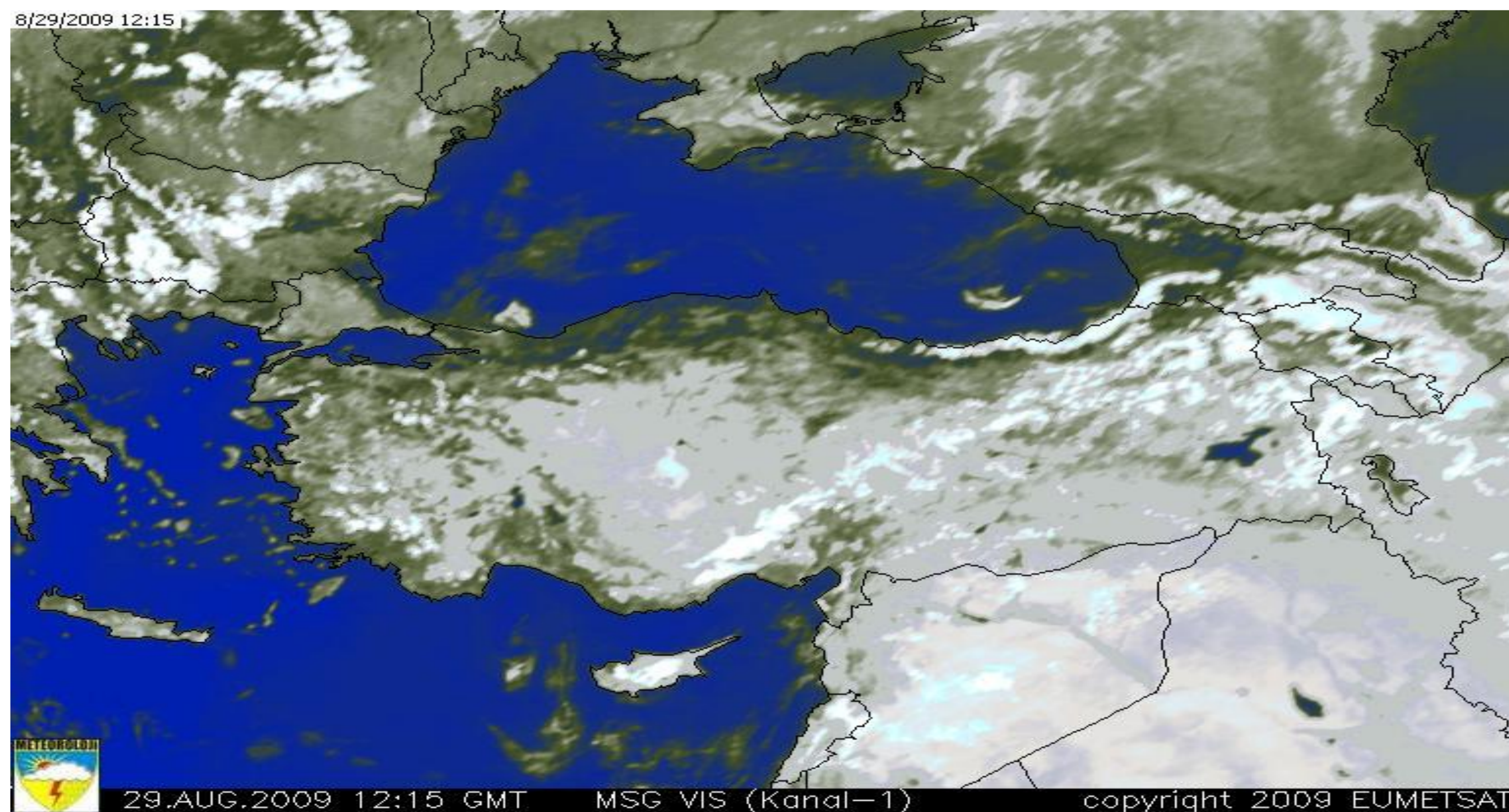
*After the field studies and laboratory researchs, different causes of colony losses were found especially between 2006-2007. The main cause was determined as *Varroa destructor* in Turkey. So, most of the studies focuses on viral infections carried by *V. destructor*. In the same period, *Nosema ceranae* infection was reported in Turkey*

pesticides, starvation, incorrect application for treatment of honeybee diseases, old Queen, the quality of comb foundation, climatic or seasonal changes are determined as other causes of honey bee colony losses

the decrease of colony losses rate in 2008 and huge number of honey production

focused on **CLIMATIC CHANGES!**

During in 2008, average temperature values, flowering period, nectar flow and amount of pollen were excellent, whereas all of them were not good in 2007. It is observed that there were still the same causes of honey bee losses in 2008 too, but climatic condition could cover and/or give rise to increase the effect of all negative causes of honey bee diseases.



Viruses always look for any opportunity to infect their host. And the biggest opportunity for them is colony weakness.

All honey bee colonies weak gradually in bad conditions, for instance bad weather, lack of nectar flow, insufficient pollen source, high rate moisture etc. All of them are not good conditions for honey bees but for viruses.

As a result, Climatic conditions can be major effect on Honey bees and Colony Losses

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