Boxwood moth Cydalima perspectalis – a dangerous invasive pest of boxwood

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In 2012 boxwood moth Cydalima perspectalis Walker, 1859 (Lepidoptera, Crambidae:Spilomelinae) was identified in Big Sochi area for the 1st time. Afterwards it expanded fast in boxwood Buxus sempervirens var. colchica. Boxwood grows there as 2nd story trees or in undergrowth. Rarely it shapes monocultures often growing together with common yew, oak and other tree species. Boxwood age in different areas varies greatly. There are woods where boxwood is over 300–500 years. In Black sea coast boxwood grows in bottom lands of rivers, creeks in mountain slopes up to 500 m above sea level.

In 2014 boxwood moth caterpillars severely damaged boxwood foliage in some Black sea coastal areas primarily in the Caucasian reserve and Sochi National Park. One of the most severely affected areas is the yew-boxwood grove in the Caucasian Nature Biosphere reserve. In some woods not only foliage but bark on branches and stems was killed completely. It resulted in mortality of some trees. In autumn 2015 it was found that numerous honey fungus Armillaria sp. fruit bodies began development on most declining boxwood trees.

Now honey fungus outbreak has shaped in the boxwood moth affected woods. This pathogen may be an individual source that would kill trees that are still viable but stay in defoliated condition and show foliage regeneration capacity.

Now days in fact there is an environmental disaster in Black sea coastal forests in the Krasnodar territory that resulted in loss of unique boxwood Buxus sempervirens var. colchica forest communities. Regeneration of such woods may take a long time period measurable for several centuries if feasible at all.