

Mini data sheet on *Dendrolimus spectabilis*

Added in 1999 - Deleted in 2004

Reasons for deletion:

Dendrolimus spectabilis has been included in EPPO Alert List for more than 3 years and during this period no particular international action was requested by the EPPO member countries. In 2004, it was therefore considered that sufficient alert has been given and the pest was deleted from the Alert List.

Dendrolimus spectabilis (Lepidoptera: Lasiocampidae) - Pine moth

Why	<i>Dendrolimus spectabilis</i> came to our attention because it appeared in a list of harmful organisms in the EU derogation (93/452/EEC of 15 July 1993) concerning <i>Pinus</i> plants from Japan.
Where	China (Hebei, Heilongjiang, Jilin, Liaoning, Shandong), Japan (Honshu, Hokkaido, Kyushu), Korea Republic (no data for north Korea).
On which plants	<i>Pinus</i> spp. Mainly <i>P. densiflora</i> and <i>P. thunbergii</i> . It can also feed on other pine species, e.g. <i>P. strobus</i> , <i>P. taeda</i> , <i>P. tabulaeformis</i> .
Damage	<i>D. spectabilis</i> is a defoliator feeding on pine needles. First-instar larvae prefer needles of the current year, but final instar larvae prefer one-year-old needles. Severe defoliation has an impact on the growth of the pine trees. Tree mortality is apparently not observed (?). In the northern part of Japan it has one generation per year, but in the southern part, it has a complex life cycle as adults emerge once or twice a year alternately. More data is needed on the biology of the pest.
Pathway	Plants for planting of <i>Pinus</i> , cut branches.
Possible risks	<i>D. spectabilis</i> is considered as a very serious defoliator of pine forests in countries where it occurs. However, more data is needed on actual losses caused by defoliation. Many studies are done on control methods (e.g. application of insect growth regulators), and particularly on biological control methods (polyhedrosis virus, <i>Bacillus thuringiensis</i> , predators and parasitoids), but there is little indication of their effectiveness. Pines are important forest trees in the EPPO region.
Source(s)	Bin-Cheng Zhang (1994) Index of economically important Lepidoptera, CABI, Wallingford, UK, 599 pp. Furuno, T. (1972) [Primary consumption by leaf-eating insects in loblolly pine canopies. Bulletin of the Kyoto University Forests], no. 44, 20-37. Habu, N. (1976) [Geographic variation of the pine moth, <i>Dendrolimus spectabilis</i> Butler (Lepidoptera: Lasiocampidae)] Japanese journal of applied Entomology and Zoology, 20(2), 55-60. Kuranaga, Z.; Varley, G.C.; Gradwell, G.R. (1975) The population dynamics of the pine moth, <i>Dendrolimus spectabilis</i> Butler, in Kyushu.] Journal of the Japanese Forestry Society, 57(6), 176-183. Li, Z.Y.; Chen, H.S.; Cong, X.Y.; Han, Y.S.; Qiao, X.R. (1998) [Study on the regrowth ability of <i>Pinus tabulaeformis</i> after damage by the pine caterpillar.] Forest Research, 11(4), 424-427. Satomi, M.; Yamamoto, H.; Takada, N.; Furuta, K. (1997) [Effects of defoliation caused by an outbreak of <i>Dendrolimus spectabilis</i> on the growth of mature <i>Pinus strobus</i> in Hokkaido.] Journal of the Japanese Forestry Society, 79(1), 9-13. Togashi, K.; Takahashi, F. (1977) [Coadaptative preferential feeding of the pine moth, <i>Dendrolimus spectabilis</i> Butler (Lepidoptera, Lasiocampidae), on the old needles of Japanese black pine, <i>Pinus thunbergii</i> Parl. Kontyu, 45(3), 399-414.

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Panel review date

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