Lachnellula willkommii **System:** Terrestrial

Kingdom	Phylum	Class	Order	Family
Fungi	Ascomycota	Leotiomycetes	Helotiales	Hyaloscyphaceae

Common name European larch canker (English)

Synonym *Trichoscyphella willkommii*
Dasyscypha willkommii

Similar species

Summary Lachnellula willkommii is a tree disease identified first in Europe and has since made its way to North America. It spreads easily from branch to branch infecting each tree (Larix decidua). Lachnellula willkommii is found in areas that have a high moisture content, in which it thrives.

view this species on IUCN Red List

Species Description
Lachnellula willkommii is visible by bulges on the trunk and branches. The bark of *Larix decidua* when infected will become wide and cracked. On the tree, fructifications of fungus will appear at a size of a few millimetres. They are orange and are saucer-like (Surini, 2004).

Notes
Symptoms of *L. willkommii* are bark necrosis, pathogenic resins, and fructification (Pãques *et al*. 1999).

Habitat Description
Maritime climates are best suited for *L. willkommii* to grow because of high moisture content (Surini, 2004).

Reproduction
L. willkommii is propagated by wind and if tree braches are close together the fungus is easily spread (Surini, 2004).

General Impacts
Lachnellula willkommii is a fungus that attacks *Larix decidua*. The fungus does not kill the tree, although in some cases , but it does inhibit growth (Pãques *et al*. 1999). The potential for *L. willkommii* to damage in North America is high and this has caused state and federal agencies to issue flyers to the public to warn and tell people to be cautious when trasporting cuttings or seedlings (Campbell, 2004).

Management Info
Preventative measures: In Maine, regulated articles consist of \"logs, pulpwood, branches, twigs, plants, scions, and other propagative materials of *Larix* spp. and *Pseudolarix* spp. except seeds.\" Regulations, such as having a permit, have been put in place to help control the spread of *L. willkommii* (CDFA, 1999).
Physical: To limit the spread of *L. willkommii*, infected branches are cut off the tree. This is done under specific conditions when the weather is dry and during winter. Some problems associated with the cutting of branches is sometimes the tools used are not sanitized properly, which in turn means that spores can be found on the tool and be easily transferred to another tree (Surini, 2004).

Principal source: Surini, T. 2004. Le Chancre du Mélèze - Larch Canker, *Lachnellula willkommii*. Inforets.

Compiler: National Biological Information Infrastructure (NBII) & IUCN/SSC Invasive Species Specialist Group (ISSG)

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ALIEN RANGE

[4] CANADA
[1] POLAND
[2] UNITED STATES
[1] CHINA
[1] SERBIA AND MONTENEGRO

BIBLIOGRAPHY

12 references found for **Lachnellula willkommii**

Managment information

California Department of Food and Agriculture (CDFA) Plant Quarantine Manual. 1999. European Larch Canker.
Summary: This lists counties in Maine where *L. willkommii* is found and tells of regulated articles of *Larix* spp. and of restrictions of transport of this tree.
Available from: http://pi.cdfa.ca.gov/pqm/manual/pdf/219.pdf [Accessed January 15, 2007]

Campbell, F. 2004. European Larch Canker - *Lachnellula (Dasyscypha) willkommii* (Hartig) Dennis. The Nature Conservancy.
Summary: The website describes the distribution of *L. willkommii* throughout North America and how state and federal agencies are trying to curb the transportation of sensitive materials.
Available from: http://tncweeds.ucdavis.edu/products/gallery/lacwi1.html [Accessed January 29, 2007]

Surini, T. 2004. Le Chancre du M�l�ze - Larch Canker, *Lachnellula willkommii*. Inforets.
Summary: The article desrbes the origins of *L. willkommii*, as well as control, distribution, epedemiology, and susceptible species.
Available from: http://inforets.free.fr/article.php3?id_article=192 [Accessed January 15, 2007]

Tkacz, B. 2002. Pest risks associated with importing wood to the United States. *Can. J. Plant Pathol.*24: 111-116.
Summary: The article explains how the importing of unmanufactured wood in the United States is dangerous. It explains pest risk assessment of wood in the United States.

Xu, Haigen, S., Qiang, Z. Han, J. Guo, Z. Huang, H. Sun, S. He, H. Ding, H. Wu, F. Wan. 2006. The status and cause of species invasion in China. Biodiversity and Conservation. 15: 2893-2904.
Summary: The arilcle discusses introduced species in China. It talks about impacts invasive organisms have made in the country and there should be quaratine measures and risk assessment procedures put in place very soon.

General information

Canadian Food Inspection Agency (CFIA). 2001. Summary of Plant Quarantine Pest and Disease Situations in 2000, *Lachnellula willkommii*.
Summary: The summary was done on insect pests, fungal pests, and viral pests. Aspects of distribution were assessed in the summary.
Available from: http://www.inspection.gc.ca/english/sci/surv/sit2000e.shtml [Accessed January 15, 2007]

Canadian Food Inspection Agency (CFIA). 2005. European Larch Canker - *Lachnellula willkommii*.
Summary: This website gives a brief decription of the distibution of *L. willkommii*.
Available from: http://www.inspection.gc.ca/english/plaveg/pestrava/lacwil/lacwile.shtml [Accessed January 15, 2007]

Karadzic, D. 1989. The Most Frequent Occurring in Plantation Larch Scots Pine and Macedonian Pine on Kopaonik Yugoslavia. *Zastita Bilja*. 40(3): 309-318.
Summary: This article discusses the fungal diseases prevelant in Yugoslavia. The degree of infection and where the disease was occurring on the trees is also mentioned.

Kulej, M. 2006. Resistance of Larches of Polish Provenances to Larch Canker *Lachnellula willkommii* (Hartig) Dennis Under Mountain Conditions of the Sacz Beskid. *Journal of Polish Agricultural Universities*.9(2).
Summary: This study was done to determine if Larches were resistant to *L. willkommii* at different ages in mountainous areas in Poland.
Available from: http://www.ejpau.media.pl/volume9/issue2/art-29.html [Accessed January 15, 2007]

Maltras, J. 2001. Provenance Studies of the Forest research Institute on the European Larch in 1948-2000. Proce Instytutu Badawczego Lesnictwa. Seria A. 908/912: 41-63.
Summary: The study was done to find susceptability to injuries of the Larch by abiotic and biotic factors.

Miller-Weeks, M., D. Stark. 1983. European Larch Canker in Maine. *Plant Dis.* 67(4): 448.
Summary: The article discusses stands infected with *Lachnellula willkommii* in Maine.

P�ques, L.E., G. Sylvestre-Guinot, C. Dalatour. 1999. Genetic variations among clones of *Larix decidua polonica* for resistance to *Lachnellula willkommii*. *Annals of Forest Science*. 56(2): 155-156.
Summary: This was a study that was done to determine resistance of the Larch to *L. willkommii*. The Larch clones were taken from native stands in Poland and the limbs were innoculated with the fungus.