

Cupressatia siskiyou

(Felt, 1917)

European species information A concise, source-based overview of the gall midge associated with *Chamaecyparis lawsoniana* (Lawson cypress)

This compilation and its editorial presentation may only be reused provided that the copyright notice is retained.

Note on the available data: The species is small, inconspicuous and develops hidden inside cones. Its actual distribution in Europe is therefore probably wider than the number of published records suggests. This document distinguishes documented records, summary literature reports and records that have not yet been independently verified.

1. Taxonomy and nomenclature

Kingdom: Animalia · Phylum: Arthropoda · Class: Insecta · Order: Diptera · Family: Cecidomyiidae · Genus: *Cupressatia* · Species: *Cupressatia siskiyou*.

The currently accepted name *Cupressatia siskiyou* (Felt, 1917) is based on the new combination established by Gagné (2013). The genus *Cupressatia* was established in 2013 for North American gall midges that had previously been misclassified. Historical combinations or synonyms include *Janetiella siskiyou* Felt, 1917 and *Craneiobia lawsoniana* de Meijere, 1935. The Natural History Museum also lists *Janetiella lawsoniana* as a historical name.

Taxonomic classification

Taxon	Classification
<i>Cupressatia</i>	Genus; Gagné, 2013
<i>siskiyou</i>	Species; Felt, 1917
Family	Cecidomyiidae – gall midges
Order	Diptera – true flies
Host	<i>Chamaecyparis lawsoniana</i> (Cupressaceae)

2. Origin and status in Europe

The species is native to the Pacific Northwest of North America; the world catalogue gives Washington and Oregon as its native range. In Europe, it is regarded as introduced and non-native. The most likely pathway of introduction is considered to be infested plants or cones of *Chamaecyparis lawsoniana*. The Norwegian alien-species list indicates that the species may already have reached Europe before 1931 with infested Lawson cypresses.

The first European record was made in the Netherlands in 1931. From there, or from other early populations, the species is thought to have spread further through trade and the movement of its host plant. Because it develops hidden inside the cones, it can easily be transported unnoticed.

3. Host plant and life cycle

Cupressatia siskiyou is strictly monophagous: its development is confined to *Chamaecyparis lawsoniana*. The larvae develop inside the cones, specifically in the vicinity of the seeds. A small cavity forms within infested seeds, where the larva lives. Young larvae are pale yellowish and later become orange.

Infested cones may appear slightly deformed or discoloured. Some remain green and closed for longer than healthy cones. The larva overwinters inside the cone in a white, silken cocoon and pupates there in spring. The species is univoltine, typically producing one generation per year.

Ecological significance: Current assessments do not indicate any significant ecological or economic impact. The Norwegian alien-species assessment rates the invasion risk as low; no documented effects on species other than the host plant are known. However, very high infestation rates have been recorded in Hungary.

4. European records and distribution

The following overview distinguishes countries with specifically documented or clearly recorded occurrences from a record that has not yet been independently confirmed. This compilation is based on a literature review and is not a complete, up-to-date GBIF distribution map.

Country	Status / note	Source / period
Netherlands	First European record	1931; de Meijere (1935)
Denmark	Recorded	Haarder et al. (2016)
United Kingdom	Recorded; including the New Forest	British dipterist checklists; record 1964
Germany	Recorded	Stelter (1988); German Cecidomyiidae faunistics
Czech Republic	Reported in European distribution literature	Skuhrová & Skuhrový (2021)
France	Reported in European distribution literature	Skuhrová & Skuhrový (2021)
Poland	Reported in European distribution literature	Skuhrová & Skuhrový (2021)
Italy	Reported in European distribution literature	Skuhrová & Skuhrový (2021)
Slovakia	Reported in European distribution literature	Skuhrová & Skuhrový (2021)
Norway	Recorded; first record in 2017	Fjellberg & Fedotova (2024)
Hungary	Recorded; nationwide survey	Haarder et al. (2025)
Bulgaria	Recorded; first record	Tomov (2023)
Ireland	Reported in 2024 as an unpublished record	Haarder et al. (2025); not verified as a standard published record

Important: The phrase “in numerous European countries” does not mean that current individual records are available for every country. Particularly for a cryptic gall midge, older literature records and the species’ present-day distribution do not necessarily coincide.

5. Particularly noteworthy finding from Hungary

Following the first record in Budapest in March 2022, Haarder, Hirka, Kiss, Paulin and Csóka investigated the distribution of the species in Hungary. Between 2022 and 2024, cones were collected at 58 sites; a total of 6,970 cones were examined. Gall midge infestation was found in all study areas. The mean infestation rate was 72%, and 55% of the sites fell into the category of 81–100% infested cones. Nevertheless, the authors do not regard the species as a serious economic or ecological pest.

The detection of *Aprostocetus* parasitoid wasps emerging from the infested cones is also noteworthy. The study did not establish whether these parasitoids were introduced from North America together with the gall midge or belong to species already native to Europe.

6. Field identification features

Feature	Observation
Host	<i>Chamaecyparis lawsoniana</i>
Affected structure	Cones; larvae in or around the seeds
External appearance	Cones often only slightly deformed or discoloured; some remain green and closed for longer
Larva	pale yellowish when young, later orange
Overwintering	inside the cone, in a white, silken cocoon
Pupation	inside the cone, in spring
Generation	one generation per year
Reliable confirmation	most reliably by opening infested cones and rearing and identifying the specimens

7. Spread and possible introduction

The most plausible pathway of spread is international trade in *Chamaecyparis lawsoniana* and other plant material. Because the larvae live inside the cones, infested material can appear almost completely normal externally. This explains why the species may remain undetected for a long time and why new national records do not necessarily indicate a recent introduction.

The species also provides a good example of the fact that an introduced species does not automatically have to cause major invasive damage. It may be locally very abundant while still having only limited effects on the ecosystem if its host range is narrowly restricted.

8. Chronology of European knowledge

Year	Event
1917	Felt describes the species as <i>Janetiella siskiyou</i> .
1931	First European record in the Netherlands.
1935	de Meijere treats the gall midge on <i>Chamaecyparis lawsoniana</i> and uses the name <i>Craneiobia lawsonianae</i> .
1964	British record from the New Forest near Minstead.
1988	Stelter publishes a detailed study of a population in Mecklenburg-Western Pomerania.
2013	Gagné establishes the genus <i>Cupressatia</i> ; current combination <i>C. siskiyou</i> .
2016	Record/confirmation for the Danish fauna in Haarder et al.
2017	First record in Norway.
2022	First record in Hungary; followed by a nationwide survey.
2023	First record in Bulgaria published.
2024	Norwegian records published; further European records compiled.
2025	Detailed Hungarian study published; 2024 Irish record mentioned as unpublished.

9. Sources and further reading

EPPO Global Database

Cupressatia siskiyou (JANESI). Taxonomy, synonyms and EPPO code. <https://gd.eppo.int/taxon/JANESI>

Fjellberg, A. & Fedotova, Z. (2024)

Cupressatia siskiyou. In: New records of gall midges (Diptera, Cecidomyiidae) from Norway. *Norwegian Journal of Entomology* 71, p. 55. DOI: 10.5281/zenodo.16038344

Gagné, R. J. (2013)

Four new genera of Nearctic Cecidomyiidae (Diptera) for species previously incorrectly placed. *Zootaxa* 3701(2): 148–158. DOI: 10.11646/zootaxa.3701.2.2

Gagné, R. J. & Jaschhof, M. (2021)

A Catalog of the Cecidomyiidae (Diptera) of the World, 5th Edition. USDA / Systematic Entomology Laboratory.

Haarder, S., Bruun, H. H., Harris, K. & Skuhravá, M. (2016)

Gall midges (Diptera: Cecidomyiidae) new to the Danish fauna. *Entomologisk Tidskrift* 137.

Haarder, S., Hirka, A., Kiss, V., Paulin, M. & Csóka, Gy. (2025)

Cupressatia siskiyou – A cryptic alien gall midge of Lawson’s cypress (*Chamaecyparis lawsoniana*).

Növényvédelem 86 [N.S. 61]: 53 ff.

Norwegian Biodiversity Information / Artsdatabanken

Alien Species List 2023: *Cupressatia siskiyou*. Assessment of establishment, spread and ecological impact.

Natural History Museum London

Species Dictionary: *Cupressatia siskiyou*. Taxonomy, synonyms and status as a non-native species in Great Britain.

Plant Parasites of Europe / Ellis

Cupressatia siskiyou: host plant, cone infestation, larval colour, cocoon and phenology.

Tomov, R. (2023)

First report of *Cupressatia siskiyou* gall midge in Bulgaria. *ESENIAS & DIAS Scientific Conference / Workshop, Abstracts*, p. 107.

10. Source assessment

For taxonomic nomenclature, the main sources consulted were EPPO, the Natural History Museum and Gagné. For European distribution, the world catalogue, Skuhrová & Skuhrový and current country-level publications were used. Particularly robust evidence comes from specific country studies such as the Norwegian records, the Hungarian survey and the Bulgarian first record. The Irish record is explicitly described as an unpublished finding and is not treated as a regular published national record.

Editorial note: This Word document is an independent compilation and is not a substitute for the original publications. The original sources should be cited when this material is used for scientific purposes.



Cupressatia siskiyou (gall)



Cupressatia siskiyou (cocoon)



Cupressatia siskiyou (young larva)



Cupressatia siskiyou (older larva)



Cupressatia siskiyou (pupa)



Cupressatia siskiyou (female)



Cupressatia siskiyou (male)