

Surveys of EU quarantine forest pests and diseases in Slovenian forests

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Introduction

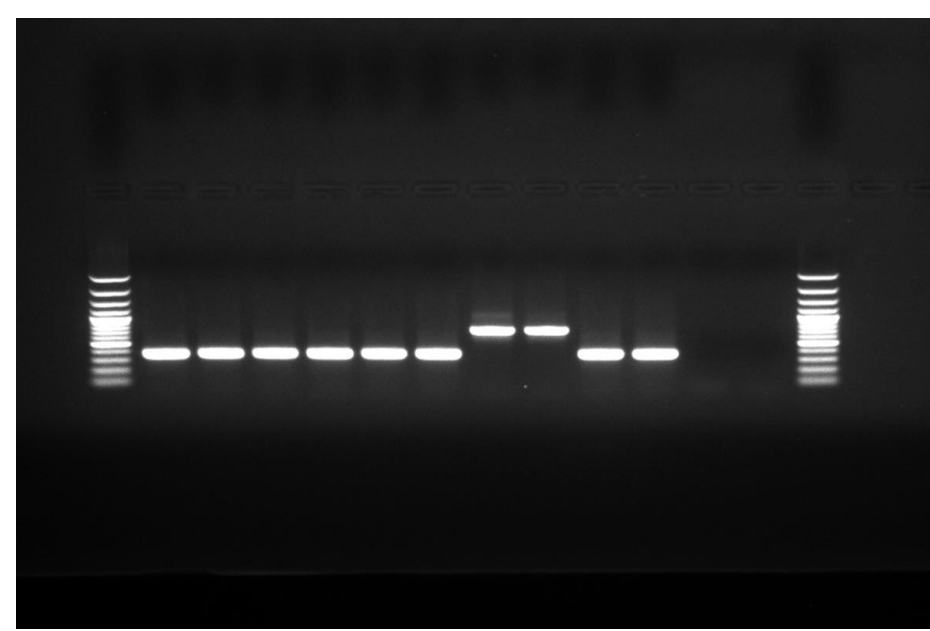
Plant health is under constant pressure from the increasing number of new and re-emerging pests resulting from globalization, trade development and climate change. With the aim of preventing the introduction of harmful organisms, detecting them early and eradicating them immediately, the European Commission has issued several regulations. The quarantine pests for the Union are listed in Commission Implementing Regulation (EU) 2019/2072 and potentially the greatest risks come from the priority quarantine pests listed in Commission Delegated Regulation (EU) 2019/1702. All of quarantine pests for Slovenia are subject to annual scheduled inspections and detection of their presence in the territory of the Member States of the European Union. In forests in Slovenia, surveys for quarantine organisms are mostly performed by Slovenian Forestry Institute and Slovenia Forest Service, organizations authorized by the Slovenian Food Safety, Veterinary and Plant Health Administration.

Laboratory for Forest Protection

Laboratory for Forest Protection (Slovenian Forestry Institute, Department of Forest Protection) is an official laboratory for plant pests, more specifically for insects and fungi found on woody plants. The laboratory is also a partner in two consortia of National Reference Laboratories - Insects and Mites and Fungi and Oomycetes. The laboratory is designated as a quarantine station. The Laboratory is accredited (SIST EN ISO/IEC 17025:2017) for the identification and detection of *Fusarium circinatum* and *Anoplophora chinensis*.



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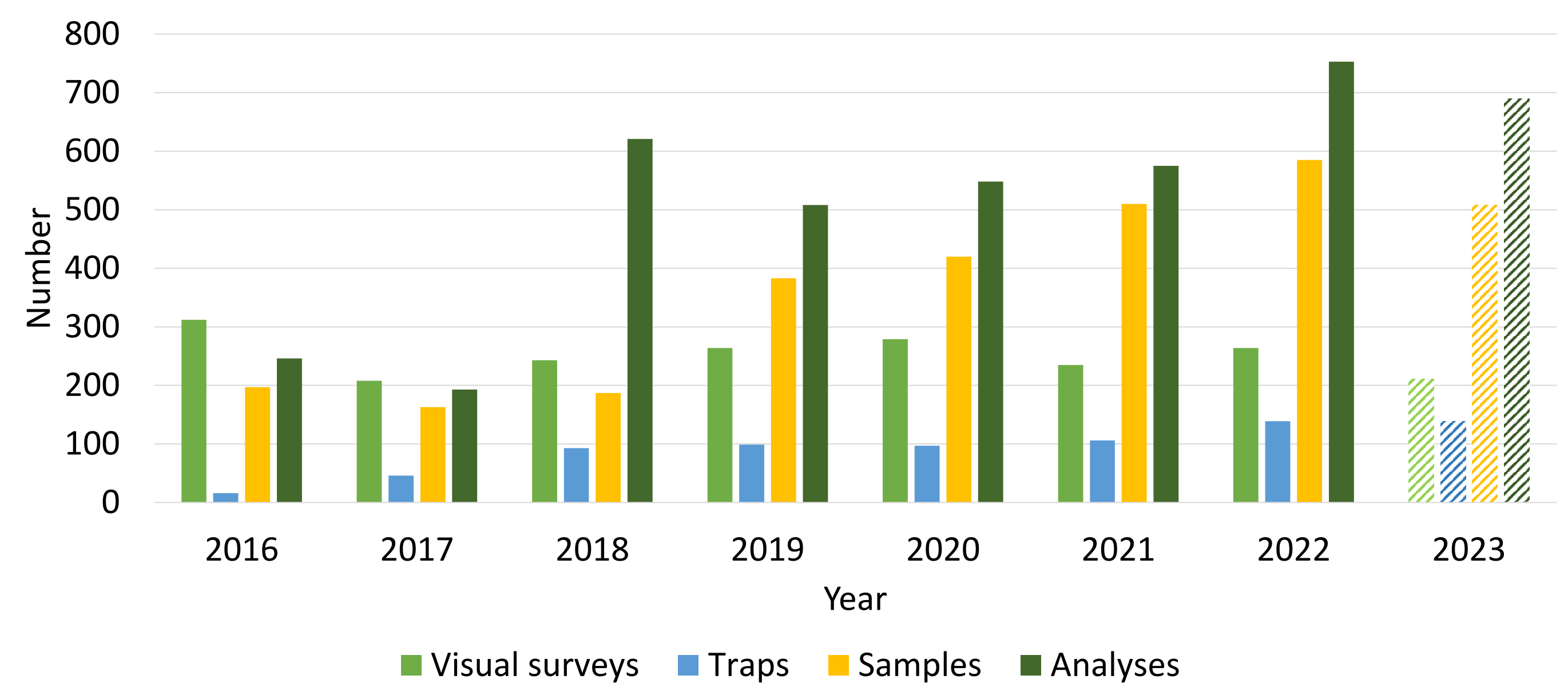


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Surveys of EU quarantine pests in forests 2016-2023



Survey programmes for quarantine pests and diseases for forests in 2022

	Categorization	Visual Survey	Trap	Morphological method	Molecular method
<i>Agrilus anxius</i>	Priority pest + Quarantine pest (Annex II A)	✓	✓	✓	✗
<i>Agrilus planipennis</i>	Priority pest + Quarantine pest (Annex II A)	✓	✓	✓	✗
<i>Anoplophora chinensis</i>	Priority pest + Quarantine pest (Annex II B)	✓	✗	✓✓	✗
<i>Anoplophora glabripennis</i>	Priority pest + Quarantine pest (Annex II A)	✓	✓	✓	✗
<i>Apriona cinerea</i>	Quarantine pest (Annex II A)	✓	✓	✓	✗
<i>Apriona germari</i>	Quarantine pest (Annex II A)	✓	✓	✓	✗
<i>Apriona rugicollis</i>	Quarantine pest (Annex II A)	✓	✓	✓	✗
<i>Bursaphelenchus xylophilus</i>	Priority pest + Quarantine pest (Annex II B)	✓*	✓*	✓*	✓*
<i>Ceratocystis platani</i>	Quarantine pest (Annex II B)	✓	✗	✓	✗
<i>Dendrolimus sibiricus</i>	Priority pest + Quarantine pest (Annex II A)	✓	✓	✓	✗
<i>Euwallacea fornicatus sensu lato</i>	Quarantine pest (Annex II A)	✓	✓	✓	✗
<i>Fusarium circinatum</i>	Quarantine pest (Annex II B)	✓	✓	✓	✓✓
<i>Geosmithia morbida</i>	Quarantine pest (Annex II B)	✓	✓	✓	✓
<i>Pityophthorus juglandis</i>	Quarantine pest (Annex II B)	✓	✓	✓	✗

✓✓ Accredited method

Quarantine pest (Annex II A): Quarantine pests not known to occur in the Union territory

Quarantine pest (Annex II B): Quarantine pests known to occur in the Union territory

Annex II, Implementing Regulation (EU) 2019/2072

* Vectors of *Bursaphelenchus xylophilus*

Methods

Traps

Together with the Slovenian Forest Service, suitable locations for trap placement are identified based on risk assessment:

- areas with increased risk of introduction (timber transport companies, timber industry, other industries using WPM from countries with an existing pest...)
- presence of host plants
- the trap should not interfere with regular work in the forest
- consent of the owner
- accessibility (terrain)



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Multi funnel traps with wet or dry collection cup are used for detecting: *Euwallacea fornicatus sensu lato*, *Pityophthorus juglandis*, *Pseudopityophthorus minutissimus*.

Cross traps with wet or dry collection cup are used for detecting: *Apriona cinerea*, *Apriona germari*, *Apriona rugicollis*, *Anoplophora glabripennis*, vectors of *Bursaphelenchus xylophilus*.

Black slit traps are used for detecting vectors of *Fusarium circinatum* and vectors of *Geosmithia morbida*.

Green sticky prism traps are used for detecting *Agrilus anxius* and *Agrilus planipennis*.

Funnel trap is used for detecting *Dendrolimus sibiricus*.



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Samples

Samples from the traps are taken regularly (weekly, after two weeks or monthly). When samples are taken from the traps, each trap is inspected for weather-related or other damage and lure is replaced as needed. The samples are marked with official stickers and the document of a taken sample is filled out. The sample is transported to the laboratory on the same day.



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Visual surveys

For visual inspections, tablets are used to help us select sites, considering the hosts of the selected quarantine pest and areas of higher risk. Samples are taken at the inspection site if needed. After taking the sample, all gear is disinfected and cleaned. The official form is filled.

In the coming year 2023

Surveys of 15 pests found in forests are planned for this year, 7 of which are priority pests. For the first time, we will conduct a surveys on *Anisogramma anomala*, *Christoneura occidentalis biennis* and *Pseudopityophthorus minutissimus*. Since 2014, *Xylella fastidiosa* has been monitored only in orchards, gardens, and public planting areas; this year, surveys for *X. fastidiosa* will also be conducted in forests.

Acknowledgments

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