Institut für nationale und internationale Angelegenheiten der Pflanzengesundheit

Institute for National and International Plant Health

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Federal Research Centre for Cultivated Plants www.julius-kuehn.de

07-08-2023

Notification of the presence of a harmful organism - update

1 G	General information	
1.1 T	-itle	Update of an outbreak of Euwallacea fornicatus sensu lato and Hypothenemus eruditus and Neocosmospora euwallacea in Germany (Brandenburg)
1.2 E	Executive summary	In August 2022, three specimen of <i>Euwallacea fornicatus</i> sensu lato were found in a trap in a tropical greenhouse that is used for touristic purposes. The finding was made during the official survey in Brandenburg. The trap was placed in a <i>Ficus</i> tree. No symptoms on plants were found in the direct vicinity of the trap during first inspections. Further investigation will be conducted to assess the extent of the outbreak and determine the source of the infestation. Currently it is presumed that the pest may have been introduced into the greenhouse with infested plants. Preliminary measures have been taken to avoid that the pest is spread further.
		Update October 2022: Three specimens of <i>Hypothenemus</i> (Scolytinae) were found, one of them in a plant and two were caught in traps. The additional Scolytinae were detected in the same tropical greenhouse during eradication measures against <i>Euwallacea fornicatus sensu lato</i> . The traps were placed at different locations in the greenhouse. No symptoms were found in the direct vicinity of the traps. One specimen was found on a <i>Barringtonia acutangula</i> plant, which showed symptoms like an exit hole, exudate and dieback of the upper plant parts. The plant was destroyed after sampling. <i>Hypothenemus</i> was identified on 13 th October 2022.
		In 2021 and 2022, plants were exclusively delivered from an operator in another Member State. The concerned <i>Barringtonia acutangula</i> originates from a consignment delivered in 2021. The concerned Member State was informed. The phytosanitary measures taken are the same as against <i>Euwallacea</i> .

Update July 2023: Neocosmospora euwallaceae has been identified on Magnolia champaca. The fungus is associated with Euwallacea fornicatus and has been detected for the first time at this location. In addition, Hypothenemus has been further identified as H. eruditus and a risk analysis has been carried out were this pest was not classified as quarantine pest because the pest is established in several EU Member States and therefore not considered non-European. In addition, the potential damage is considered low. Additional infested plants were found: Ficus natalensis subsp. leprieurii, Clerodendrum quadriloculare and Ficus microcarpa. All infested plants are destroyed.

Meanwhile 10 traps were placed within the building. Trap catches are at a low level and hotspots could not be identified. 3 traps are placed outside of the building in the buffer zone of 100 m. Neither *Euwallacea* nor *Hypothenemus* beetles were captured outside so far nor were symptoms found on the outdoor plants.

2	Information concerning the single au	thority and responsible persons
2.1	Notification from	Julius Kühn-Institut (JKI), Institute for National and International Plant Health, Germany
2.2	Official contact:	Katrin Kaminski, Tel: +49 39 46 47 7515, outbreaks@julius-kuehn.de
3	Location	
3.1	Location	In Brandenburg
4	Reason of the notification and the per	st status
4.1	First finding in Germany or in the area	Confirmed appearance of the pest in part of the territory of Germany, in which its presence was previously unknown.
4.2	Pest status of the area where the harmful organism has been found	Present, at low prevalence, in specific parts of the area where host plants are grown
	present, after the official confirmation.	Concerns Euwallacea fornicatus sensu lato and Hypothenemus eruditus (protected conditions).
4.3	Pest status in Germany before the official confirmation of the presence, or suspected presence, of the harmful organism.	Transient, actionable, under eradication Concerns Euwallacea fornicatus sensu lato.

4.4 Pest status in Germany after the official confirmation of the presence of the harmful organism.

Present, under eradication, only in some parts of Germany, only in greenhouses

Concerns *Euwallacea fornicatus sensu lato* and *Neocosmospora euwallaceae*.

5 Finding, sampling, testing and confirmation of the harmful organism

5.1 How the presence or appearance of the harmful organism was found.

Pest related official survey.

The concerned location was considered a risk location in the survey plan of the plant protection service of Brandenburg due to deliveries from another Member State or Third countries. Only a tropical greenhouse is concerned by these deliveries. The surrounding area was not considered at special risk because only plants from German nurseries are grown outdoors. In 2021, the location was already inspected visually. In 2022, a trap was used.

All host plants of *Euwallacea* were inspected, marked and documented (location of planting, year of planting, species, no.) to find the source of the infestation.

Additional traps were installed. However, the level of findings in traps is low and not concentrated in one part of the greenhouse. Therefore, no clear source of infestation could be found. Symptoms could only be found on one *Barringtonia acutangula* plant so far where infestation with *Hypothenemus* was detected.

<u>Update July 2023:</u> Plants and beetles were investigated for the symbiotic fungus already before but *N. euwallaceae* could only be identified now.

5.2 Date of finding:

05-08-2022

5.3 Sampling for laboratory analysis.

Date of sampling: 27-06-2022

Three beetles were taken from a trap that was placed in a *Ficus* tree. In October 2022, 2 beetles of *Hypothenemus* were found in two different traps. Another beetle was found in a *Barringtonia acutangula* plant.

<u>Update July 2023:</u> Samples were taken of 3 big pieces of branches of *Magnolia champaca*. The branches included *Euwallacea fornicatus* sensu lato. The inner part of the branches showed brown to grey color. The infestation with the fungus was detected near the exit holes. In addition, trapping is continued.

5.4 Name and address of the Laboratory

Landesamt für Ländliche Entwicklung, Landwirtschaft und Flurneuordnung (LELF)

		Referat 43 Saatenanerkennung. Phytopathologie 15806 Zossen Germany
5.5	Diagnostic method	Morphological method and PM 7/129 (2) DNA barcoding as an identification tool for a number of regulated pests, EPPO Bulletin (2021) 51(1)
5.6	Date of official confirmation of the harmful organism's identity.	05-08-2022
6	Infested area, and the severity and so	ource of the outbreak in that area
6.1	Size and delimitation of the infested area.	The actually infested area is not yet known. The entire greenhouse is 66 000 m² and the size of the planted area is not known exactly to the plant protection service.
6.2	Characteristics of the infested area and its vicinity.	Physically closed conditions: public site other than greenhouse
6.3	Host plants in the infested area and its vicinity	Ficus sp., Barringtonia acutangula, Magnolia champaca , Clerodendrum quadriloculare
		Many different plant species are grown in the tropical greenhouse. The greenhouse is used for touristic purposes.
		Approximately 100 plant species are grown in the greenhouse and appr. 60 of these plant species are hosts of <i>Euwallacea fornicatus</i> sensu lato.
6.4	Infested plant(s), plant product(s) and	Object: trap
	other object(s).	The trap was placed in a <i>Ficus</i> tree and 3 specimen of <i>Euwallacea fornicatus</i> sensu lato were caught.
		Update October 2022: Barringtonia acutangula (1 pce) infested with Hypothenemus, 2 specimen of Hypothenemus were caught in a trap.
		Update July 2023:
		In 2022, 46 specimen of <i>Euwallacea</i> were caught in 10 traps. Until July 2023, a total of 170 <i>Euwallacea</i> specimen were caught.
		In 2022, 96 specimen of Hypothenemus were caught in 10 traps. Until July 2023, a total of 200 Hypothenemus specimen were caught.
		Ficus benjamina (2 pce): Euwallacea and Fusarium (probably Fusarium solani)

	Ficus microcarpa (2 pce): Euwallacea, Hypothenemus and Neocosmospora Magnolia champaca (1 pce): Euwallacea and Neocosmospora Ficus natalensis subsp. leprieurii (1 pce): Neocosmospora from dead parts of the plant Ficus binnendijkii (2 pce): Euwallacea and Hypothenemus Clerodendrum quadriloculare (1 pce): Neocosmospora A total of 7 species were found infested, 4 with Euwallacea, 3 with Hypothenemus, and 4 with Neocosmospora.
6.5 Severity of the outbreak.	Currently, only a slight infestation is observed. No infested plants have been found to date, but further inspections of the site will be conducted to investigate the situation. So far, the owner has not noticed any damage or symptoms. Update October 2022: One infested Barringtonia plant was found (Hypothenemus) which showed symptoms. Update July 2023: Several plants with symptoms were sampled and infestations with Euwallacea fornicatus sensu lato and Hypothenemus eruditus were detected. Neocosmospora euwallaceae has been identified on Magnolia champaca. The fungus is associated with E. fornicatus and has been detected for the first time at this location. According to the plant protection service the infestation level is low and hotspots could not be identified.
6.6 Source of the outbreak	It is presumed that the pest was introduced with infested plant material. A company located in another Member State who also receives plants from other producers delivered the plant material of the tropical greenhouse. The last consignment arrived in April 2022. Trace-back investigations were carried out. Update July 2023: The responsible plant protection service suspects that the infestation may have been present in the greenhouse for some time. The opening of the tropical greenhouse was in 2004/2005. It cannot be clarified whether pests have been introduced recently or already some time ago because also plants were found to be infested that are grown in the greenhouse for some years.

7	Official phytosanitary measures	
7.1	Adoption of official phytosanitary measures.	Official phytosanitary measures will be taken. Inspections and a survey will be carried out in the greenhouse. All plant material and debris is not allowed to leave the greenhouse unpacked. It is shredded, packed and safely transported directly to a waste incineration plant. Currently, the only plant material that may be removed is that which normally occurs during minor maintenance activities. Update October 2022: The shredded, packed and marked
		plant debris are regularly brought to a waste incineration plant. This measure has been in force since 23 August 2022 and concerns all Scolytinae that have been found in the tropical greenhouse.
		 Update July 2023: A buffer zone of 100 m around the building was demarcated. Repellents must be used as deterrents at all entrances and exits throughout the year. All infested plants are destroyed. Host plants of <i>E. fornicatus</i> sensu lato and <i>Neocosmospora euwallacea</i> must not be planted in the greenhouse and the surrounding buffer zone.
7.2	Date of adoption of the official phytosanitary measures.	05-08-2022
7.3	Identification of the area covered by the official phytosanitary measures.	66 000 m ² The whole tropical greenhouse has been demarcated as infested zone. A buffer zone of 100 m radius has been established around the greenhouse.
7.4	Objective of the official phytosanitary measures.	Eradication
7.5	Measures affecting the movement of goods.	Measures do not affect import or movement within the Union of goods.
7.6	Specific surveys.	Yes, a survey of symptoms was carried out on the host plants. Additional traps were placed in the greenhouse. In 2022, A survey was carried out in the buffer zone around the greenhouse. Possible host trees in the buffer zone (<i>Acer</i> , <i>Quercus</i> , <i>Pinus</i> etc.) were registered for that purpose.

	Pest risk analysis/assessment	Pest risk assessment it not required. Pests are listed in Annex II A of the Implementing Regulation (EU) 2019/2072. Hypothenemus eruditus: Pest risk assessment exists (Express-PRA)
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