

ORGANISATION EUROPEENNE ET MEDITERRANEENNE POUR LA PROTECTION DES PLANTES EUROPEAN AND MEDITERRANEAN PLANT PROTECTION ORGANIZATION

# **EPPO** Reporting Service

### No. 7 PARIS, 2010-07-01

CONTENTS		Pests & Diseases
2010/122	- Anoplophora chinensis eradicated from the Netherlands	
2010/123	- Update on the outbreaks of Anoplophora chinensis in Italy	
2010/124	- Isolated findings of Anoplophora chinensis and A. glabripennis in the United	d Kingdom
<u>2010/125</u>	- Update on the outbreak of Anoplophora glabripennis in Alsace (FR)	
<u>2010/126</u>	- Outbreak of Spodoptera litura in the United Kingdom	
<u>2010/127</u>	- Rhagoletis cingulata occurs in Switzerland, but not R. indifferens	
<u>2010/128</u>	<ul> <li>First record of <i>Rhagoletis cingulata</i> in Belgium</li> </ul>	
<u>2010/129</u>	<ul> <li>First record of Rhagoletis cingulata in Austria</li> </ul>	
<u>2010/130</u>	- Situation of <i>Rhagoletis cingulata</i> in Germany	
2010/131	- First report of Grapevine flavescence dorée phytoplasma in Austria	
<u>2010/132</u>	- Flavescence dorée phytoplasma detected in Clematis vitalba and Dictyopha	ara europaea
<u>2010/133</u>	- Ditylenchus destructor does not occur in North Carolina (US)	

#### 2010/122 Anoplophora chinensis eradicated from the Netherlands

In 2008 and 2010, one isolated finding and one outbreak of *Anoplophora chinensis* (Coleoptera: Cerambycidae - EPPO A2 List) were detected in Netherlands (RS 2008/002, RS 2009/173, RS 2010/025).

The outbreak reported in 2008 in Westland concerned a small number of infested trees (all within a radius of 30 m), directly adjacent to company importing *Acer* trees from Asia. In 2008, 8 trees were found infested on a public green (26 larvae and 22 exit holes in total). In mid August 2009, following the destruction of the plants growing underneath the trees to facilitate surveillance, 3 more plants were found infested (2 *Cornus* plants, each harbouring 1 larva - 1 *Crataegus* showing 2 fresh exit holes).

The finding reported in 2010 in Boskoop concerned 1 *Carpinus* tree with 1 recent exit hole and 2 larvae. Again, it was directly adjacent to an importing company of *Acer* trees from Asia. At the same location, 7 old exit holes were detected in two old dead stumps of *Acer palmatum*.

In both cases, eradication measures were taken and combined with intensive surveillance. All potential host plants (broad-leaved trees, *Pinus* spp. and *Cryptomeria* spp.) within a range of 100 m around infested trees were removed. These plants were also individually dissected and examined for symptoms. Intensive surveillance was carried out in the demarcated areas surrounding the infested sites, and included destructive sampling (which targeted at least 1% of all plants in each lot). In total more than 85 000 plants were destroyed in 2010. Additional surveys were also carried out at other locations in the Netherlands. No further specimens of *A. chinensis* or signs of infestation could be found in demarcated areas or in other locations. Therefore in July 2010, the NPPO of the Netherlands officially declared the eradication of *A. chinensis*. Specific surveillance for this pest will nevertheless continue.

The pest status of *Anoplophora chinensis* in the Netherlands is officially declared as: Absent, eradicated.

Source: NPPO of the Netherlands (2010-07).

Additional key words: absence, eradication

Computer codes: ANOLCH, NL

#### 2010/123 Update on the outbreaks of *Anoplophora chinensis* in Italy

The NPPO of Italy recently provided an update on the situation of *Anoplophora chinensis* (Coleoptera: Cerambycidae - EPPO A2 List) in the two regions where the pest has been found.

#### Lombardia region

Anoplophora chinensis was found for the first time near Parabiago, province of Milano in spring 2000 (EPPO RS 2001/101), and it then spread to other provinces of Lombardia. Surveys conducted in 2009 showed that *A. chinensis* occurs in 32 municipalities in the provinces of Milano (23 municipalities), Varese (7) and Brescia (2). In 2009, the pest was detected in 2 new municipalities: Settimo Milanese in 4 trees and Ossona in 34 trees. All infested trees were subsequently removed. From February to April 2010, more than 7 000 trees were destroyed in Lombardia (i.e. an average of 100 trees per day). Maps of the delimited areas (focus and buffer zones) in Lombardia can be viewed on the Internet: <a href="http://www.agricoltura.regione.lombardia.it/shared/ccurl/264/615/ML\_VA\_Anoplophora.pdf">http://www.agricoltura.regione.lombardia.it/shared/ccurl/264/615/ML\_VA\_Anoplophora.pdf</a>

Lazio region

As reported in RS 2008/194, *A. chinensis* was detected in July 2008 on several trees in a public park (Parco Comunale di Via Porta San Sebastiano) in the city of Roma, and eradication measures were put into place. In June 2010, 2 adults of *A. chinensis* (1 dead beetle, 1 living female) and 1 *Ulmus* tree showing 2 exit holes were found in the infested area. In July 2010, another adult of *A. chinensis* was caught in a private garden, and a single exit hole was detected on a horse chestnut tree (*Aesculus hippocastanum*). All infested trees, as well as the potential hosts located within a radius of 20 m, were destroyed. All findings were made within the already delimited focus area.

The situation of *Anoplophora chinensis* in Italy can be described as follows: Present, found in several localities in Lombardia (provinces of Varese, Milano, Brescia) and in one site in Lazio (city of Roma), under eradication.

Source: NPPO of Italy (2010-04, 2010-07, 2010-08).

Additional key words: detailed record

 $\label{eq:computer codes: ANOLCN, IT} Computer codes: ANOLCN, IT$ 

## 2010/124 Isolated findings of *Anoplophora chinensis* and *A. glabripennis* in the United Kingdom

The NPPO of the United Kingdom recently informed the EPPO Secretariat of isolated findings of *Anoplophora chinensis* (Coleoptera: Cerambycidae - EPPO A2 List) and *A. glabripennis* (EPPO A1 List) on its territory. These findings were all reported by members of the public, highlighting the importance of publicity in relation to these pests. In all cases, eradication measures have been taken.

#### Anoplophora chinensis

Three adult beetles were reported from different areas of England: Merseyside, East Sussex and Rutland. The findings in Merseyside and East Sussex were associated with Japanese maple (*Acer palmatum* and *Acer shirasawanum* cv. 'Aureum'), with single exit holes identified in the plants concerned. The plants were approximately two years old, purchased from local retailers, and while there was no information about their exact origin, it was clear from their labelling that they were not from the United Kingdom. In the case of the finding in Rutland, a single beetle was reported in the grounds of a local school. An initial survey did not identify the host plant from which the beetle emerged, and the survey area is being extended to cover the surrounding 100 m. At this stage, as only 1 isolated beetle has been found with no evidence of a pest population being present, there has been no demarcation of areas in accordance with EU Decision 2008/840/EC.

#### Anoplophora glabripennis

The pest was found in Cumbria and is most likely to be associated with wooden packing material, which had been used to transport stone from China at a nearby site.

The situation of both *Anoplophora chinensis* and *A. glabripennis* in the United Kingdom can be described as follows: Transient, isolated findings have been made but have not led to pest establishment, under eradication.

Source: NPPO of the United Kingdom (2010-07).

Additional key words: incursion

#### 2010/125 Update on the outbreak of *Anoplophora glabripennis* in Alsace (FR)

The NPPO of France recently sent the EPPO Secretariat more information about the outbreak of *Anoplophora glabripennis* (Coleoptera: Cerambycidae - EPPO A1 List) in Alsace. Two poplar trees infested by *A. glabripennis* had been discovered in July 2008 at the port of Strasbourg (EPPO RS 2009/045), and it was suspected that the pest had been introduced via imports of granite from China. The two infested trees were destroyed and surveys carried out in 2008 and 2009 within a radius of 1000 m (including the city of Strasbourg) did not detect the pest. However in July 2010, exit holes were detected on 3 *Acer* trees located 250 m away from the initial finding. Investigations showed that these infested trees contained larvae at different development stages and 2 adult beetles. Infested *Acer* trees were destroyed and intensive surveys are being carried out within a 1000 m radius. All potential host trees located in the vicinity of this outbreak will be removed next winter (2010/2011), and intensive surveys will continue in 2010/2011.

Source: NPPO of France (2010-07).

Additional key words: detailed record

Computer codes: ANOLGL, FR

#### 2010/126 Outbreak of *Spodoptera litura* in the United Kingdom

In January 2010, the presence of *Spodoptera litura* (Lepidoptera: Noctuidae - EPPO A1 List) was detected on pot plants of *Begonia* hybrids in the South of England, United Kingdom. The outbreak was found in a glasshouse at a nursery site in Hampshire, in a *Begonia* crop produced from cuttings imported from the Netherlands. Sixteen larvae of *Spodoptera* spp. larvae have been detected, two of these have been confirmed as *S. litura* when they emerged as adults in quarantine. As of February 2010, no adults have been found in the nursery and therefore there is no evidence of a second generation. The nursery concerned is conducting regular checks for further larvae and monitoring for adults using light traps. Eradication is being pursued using a combination of insecticidal treatments and hand removal of larvae.

The pest status of *Spodoptera litura* in the United Kingdom is officially declared as: Transient, actionable, under eradication.

Source: NPPO of the United Kingdom (2010-02).

Additional key words: incursion

Computer codes: PRODLI, GB

#### 2010/127 Rhagoletis cingulata occurs in Switzerland, but not R. indifferens

Based on several light trapping records, it was reported that *Rhagoletis indifferens* (Diptera: Tephritidae - EPPO A1 list) was present in Switzerland. This fruit fly was first caught in Ticino in 1983 and was then considered established in the south of Switzerland with low population densities (see EPPO RS 516/15 of 1991, 525/15 of 1992 and RS 94/110). However more recent studies (Merz & Niehuis, 2001) showed that the insect concerned was not *R. indifferens* but the closely related species *R. cingulata* (EPPO A2

List) which has also been recorded in other European countries (Croatia, Germany, Hungary, Netherlands, Slovenia). It is now considered that all earlier records of *R. indifferens* in Switzerland were misidentifications with *R. cingulata*.

The situation of *Rhagoletis indifferens* in Switzerland can be described as follows: Absent, earlier records were misidentifications of *R. cingulata*.

The situation of *Rhagoletis cingulata* in Switzerland can be described as follows: Present, first trapped in 1983 in Ticino, established in the South.

Source: Lampe I, Burghause F, Krauthausen HJ (2005) Introduction and distribution of the American Eastern cherry fruit fly, *Rhagoletis cingulata*, in the Rhine Valley, Germany. Proceedings of the BCPC Symposium on 'Introduction and spread of invasive species', Berlin, 200506-09/11, No. 81, 135-140.

Merz B, Niehuis M (2001) [Remarkable records of fruit flies (Diptera, Tephritidae) from Rhineland-Palatinate (Germany)]. *Dipteron* 4(1), 57-64.

NPPO of Switzerland (2010-08).

Additional key words: absence, new record

Computer codes: RHAGCI, RHAGIN, CH

#### 2010/128 First record of *Rhagoletis cingulata* in Belgium

During faunistic studies, the presence of *Rhagoletis cingulata* (Diptera: Tephritidae - EPPO A2 List) has been detected for the first time in Belgium. Three male specimens were found in 2004 on fruiting *Prunus serotina*: 1 in a pasture near Woluwé-Saint Lambert (Brussels-Capital region), and 2 in a military camp near Arlon (Wallonia region). This is the first time that *R. cingulata* is reported from Belgium. From the literature, there are no reports of this fruit fly on cultivated *Prunus* in Belgium.

The situation of *Rhagoletis cingulata* in Belgium can be described as follows: Present, 3 specimens caught in 2004 at 2 locations (Wallonia and Brussels region) on wild *Prunus serotina*, no damage reported on cultivated *Prunus*.

Source: Baugnée JY (2006) Contribution à la connaissance des Tephritidae de Belgique (Diptera: Brachycera). *Notes faunistiques de Gembloux* 59(2), 63-113.

Additional key words: new record

Computer codes: RHAGCI, BE

#### 2010/129 First record of *Rhagoletis cingulata* in Austria

A survey on non-European cherry fruit fly species, *Rhagoletis cingulata* (Diptera: Tephritidae - EPPO A2 List) and *Rhagoletis indifferens* (EPPO A1 List) was carried out during the cherry growing seasons of 2007 and 2008 in Austria. The likelihood of detection of *R. cingulata* was expected to be high, since the species was recently detected in neighbouring countries (such as Croatia, Germany and Hungary). The opposite was expected for *R. indifferens* which has not been detected in Europe (all previous records were misidentifications of *R. cingulata*). The survey was carried out at 11 sampling sites in 2007 and 6 in 2008. Sampling sites were located in Vienna and in the provinces of Burgenland and Steiermark which are the main cherry-growing areas. Yellow sticky traps were placed in single cherry trees, small backyard orchards and in large-scale commercial orchards. In 2007, 2 specimens of *R. cingulata* (all others were *R. cerasi*) were caught in

traps placed in *P. avium* trees at 2 different locations (Vienna and Steiermark). In 2008, *R. cerasi* was caught again in large numbers but not *R. cingulata*. It is not known whether the findings made in 2007 correspond to established populations (at low levels) or to accidental introductions from countries where *R. cingulata* occurs. This is the first time that *R. cingulata* is reported from Austria. *R. indifferens* was not caught during this survey. The situation of *Rhagoletis cingulata* in Austria can be described as follows: Present, 2 specimens were caught on *Prunus avium* in 2007 (Vienna and Steiermark), not caught in 2008.

Source: Egartner A, Zeisner N, Hausdorf H, Blümel S (2010) First record of *Rhagoletis* cingulata (Loew) (Dipt., Tephritidae) in Austria. *Bulletin OEPP/EPPO Bulletin* 40(1), 158-162.

Additional key words: new record

Computer codes: RHAGCI, AT

#### 2010/130 Situation of *Rhagoletis cingulata* in Germany

In Germany, the first specimen of *Rhagoletis cingulata* (Diptera: Tephritidae - EPPO A2 List) was caught in 1999 in Rheinland-Pfalz (EPPO RS 2002/006). In 2003, a few specimens were caught on yellow sticky traps in cherry orchards in the same area. Since 2004, the number of insects caught in the cherry-growing areas of Rheinland-Pfalz increased considerably and the species started to be found in other parts of the country (EPPO RS 2006/003). In recent studies, it is stated that *R. cingulata* has been detected in the main cherry-growing regions of Germany: Baden-Württemberg, Brandenburg, Bayern, Hessen, Hamburg, Niedersachsen, Nordrhein-Westfalen, Rheinland-Pfalz, Sachsen, Sachsen-Anhalt and Thüringen, attaining high abundance in some of these regions. It is also noted that *R. cingulata* mainly occurs in sour cherry (*Prunus cerasus*) orchards, and in areas where *Prunus mahaleb* and *Prunus serotina* are present. In some years and locations, it is estimated that *R. cingulata* has caused more than 20% damage in sour cherries. The situation of *Rhagoletis cingulata* in Germany can be described as follows: Present,

The situation of *Rhagoletis cingulata* in Germany can be described as follows: Present, first caught in 1999 in Rheinland-Pfalz; now found in Baden-Württemberg, Brandenburg, Bayern, Hessen, Hamburg, Niedersachsen, Nordrhein-Westfalen, Rheinland-Pfalz, Sachsen, Sachsen-Anhalt, Thüringen, mainly on *Prunus cerasus* (sour cherry).

Source: Vogt H, Köppler K, Dahlbender W, Hensel G (2008) Observations of *Rhagoletis* cingulata, an invasive species from North America, on cherry in Germany. Proceedings of the 7<sup>th</sup> International Conference on Integrated Fruit Production, (Avignon, FR, 2008-10-27/30), 228-232.

Additional key words: detailed record

Computer codes: RHAGCI, DE

#### 2010/131 First report of Grapevine flavescence dorée phytoplasma in Austria

The NPPO of Austria recently informed the EPPO Secretariat of the first finding of Grapevine flavescence dorée phytoplasma (EPPO A2 List) on its territory. The phytoplasma was detected in 2009 on grapevine (*Vitis vinifera*) and *Clematis vitalba* in Steiermark. In vineyards, samples had been collected from different parts of the plants and sent for diagnosis to a laboratory of the Institute of Plant Health. The phytoplasma was detected on *Vitis vinifera* cvs. 'Isabella', 'Müller Thurgau' and 'Sämling 88' and on *Clematis vitalba* 

by PCR, RFLP and sequencing. These results were confirmed by another reference laboratory. Phytosanitary measures were immediately taken to eradicate flavescence dorée. All infested plants of *Vitis vinifera* and *Clematis vitalba* were uprooted and destroyed. In addition, a focus zone (1 km surrounding the outbreak) and a buffer zone (5 km surrounding the focus zone) were delimited at the beginning of the 2010 growing season. Regulations of the regional government of Steiermark about the control of *Scaphoideus titanus* will be amended.

The pest status of Grapevine flavescence dorée phytoplasma in Austria is officially declared as: Local outbreaks, under eradication.

Source: NPPO of Austria (2010-02).

Additional key words: new record

Computer codes: PHYP64, AT

#### 2010/132 Flavescence dorée phytoplasma detected in *Clematis vitalba* and *Dictyophara europaea*

Studies were carried out from 2002 to 2007 in Italy and the Balkans to better understand the relationships between isolates of flavescence dorée phytoplasma (EPPO A2 List) found in clematis (Clematis vitalba) and grapevine (Vitis vinifera). A total of 399 clematis and 107 grapevine samples were collected from Italy and the Balkans. Analysis showed that 36% of the clematis plant samples were infected by phytoplasmas which, in grapevine, are associated with flavescence dorée. It is noted that infected clematis plants were also found in areas where flavescence dorée has never been reported (such as Macedonia, Croatia and parts of Italy and Serbia). In addition, extensive surveys were carried out in Italy (8 sites in Veneto) and Serbia (10 sites) to obtain information on potential insect vectors present in the field. Hemipteran species were collected (sweep net) from infected plants of clematis and grapevine, and also from grass species in meadows. When examining all potential vectors of flavescence dorée (other than the known vector Scaphoideus titanus), only Dictyophara europaea (Auchenorrhyncha: Dictyopharidae) was found to be infected by flavescence dorée phytoplasma. The pathogen was detected in 20 specimens (out of 180 - 11%) of Scaphoideus titanus, and in 18 specimens (out of 527 - 3.4%) of D. europaea. S. titanus was consistently found in grapevine (although some individuals were caught on clematis) while *D. europaea* was caught on both grapevine and clematis. Preliminary transmission experiments showed that *D. europaea* can transmit flavescence dorée phytoplasma to grapevine and, therefore suggested that it could be an occasional vector of flavescence dorée phytoplasma from clematis to grapevine. In the past, it was thought that only grapevine and S. titanus were involved in the disease epidemiology, but these results showed that other hosts and vectors may also play a role.

Source: Filippin L, Jović J, Cvrković T, Forte V, Clair D, Toševski I, Boudon-Padieu E, Borgo M, Angelini E (2009) Molecular characteristics of phytoplasmas associated with *Flavescence dorée* in clematis and grapevine and preliminary results on the role of *Dictyophara europaea* as a vector. *Plant Pathology* 58(5), 826-837.

Additional key words: epidemiology

Computer codes: PHYP64

#### 2010/133 Ditylenchus destructor does not occur in North Carolina (US)

USDA-APHIS recently informed the EPPO Secretariat that *Ditylenchus destructor* (EU Annexes) is absent from North Carolina (US). The previous EPPO record was based on an official statement sent to the EPPO Secretariat in 1994 but this was erroneous. There are no published records of *D. destructor* in North Carolina, and this nematode species has never been detected during research studies, routine diagnostics or specific surveys. Therefore, it is now considered that *D. destructor* does not occur in North Carolina. The situation of *Ditylenchus destructor* in North Carolina can be described as follows: Absent, the earlier record was erroneous, confirmed by general surveillance.

Source: USDA-APHIS (2010-07).

Additional key words: denied record, absence

Computer codes: DITYDE, US