CHRISTIAN COCQUEMPOIT (*)

ALIEN LONGHORNED BEETLES (COLEOPTERA CERAMBYCIDAЕ): ORIGINAL INTERCEPTIONS AND INTRODUCTIONS IN EUROPE, MAINLY IN FRANCE, AND NOTES ABOUT RECENTLY IMPORTED SPECIES

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Cocquempot C. – Alien longhorned beetles (Coleoptera Cerambycidae): original interceptions and introductions in Europe, mainly in France, and notes about recently imported species.

Interceptions of eighteen species of longhorned beetles in Europe, mainly in France, are reported and information about their origin, biology, host plants, potential damage, and economical impact are given. Notes about the updated situation of the most recently imported pest species are presented.

KEY WORDS: Coleoptera, Cerambycidae, Interceptions, Introductions, Europe, France.

INTRODUCTION

As soon as humans wanted and were able to circulate between remote areas on earth, they created specific conditions very favourable to artificial spreading of insect pests, which sometimes led to a substantial increase of their distribution, or produced invasions in new habitats. The first occurrences of insect spreading on long distances concerned commensal or medical species associated with humans or their pets, and their stored food products, dried meat and plants. As long as the means of transport were restricted to draught animals, or to inland or maritime navigation, the volume, speed, and quality of the international exchanges were still limited, as well as the numbers of insect pests transported. From the nineteenth century, exchanges of animal and plant materials increased simultaneously with a higher availability of more diversified and intensified means of transport. Industrialization and the increase in trade with the western hemisphere created new pathways to importation and expansion of insect pest populations. Some of these species are now more or less cosmopolitan. The development of exotic plant production outside their native area also increased the potential of some pests to develop in new habitats or under different climates.

A high proportion of the insects circulating passively are Coleoptera Cerambycidae. Duffy (1953) made a first summary of the new introductions, importations, and establishment of exotic pests into the British Islands, but his work is also valid for other European countries. Brustel et al. (2002) reported a few examples of interceptions and introductions in France, but it seems that more than 250 species of exotic cerambycids were involved in passive movements within a particular country, and/or within Europe.

Duffy's work (1953) is a solid basis for the study of the exotic cerambycids that were imported in Europe. Additional publications by the same author (Duffy, 1957, 1963, 1968, 1980) completed the initial work, and this work as a whole shows that, 50 years ago, the importations of cerambycids were already considered as serious threats to agriculture and to various forest ecosystems.

The aim of this note is to inventory and make a presentation of the new national records of interceptions since last 20 years, and to update the informations related to well-known introductions in Europe.

NEW NATIONAL INTERCEPTIONS AND INTRODUCTIONS OF LONGHORNED BEETLES IN EUROPE

*Bardistus cibarius* (Newman, 1841)
(Cerambycinae, Phytoecinodini) (Barbee) (Fig. 1, 1)

*New interception record* – Many living adults of *B. cibarius* were collected in early July, 2002 by F. Blanchon in the nursery of the botanical garden "Jardin du Conservatoire du Littoral" at Rayol-Canadel-sur-Mer (Var, France). These specimens emerged from Black Boy plants (*Xanthorrhoea* sp., *Xanthorrhoeaceae*), a grass tree, or balga grass, imported from Australia and initially planted in 1999 in the nursery. On the day of collection, a high population of the pest was found; it led to subsequent decline and death of the trees.

*Origin* – The insect is native to Western Australia. It is known to be consumed as larvae by Australian aborigines who call it "Barbee" (Tillyard, 1926; Duffy, 1953; Irvine, 1989).

*Biological, Host plants – B. cibarius* is specific to *Xanthorrhoea* (Tillyard, 1926; Duffy, 1963; Hawkswood, 1993).

*Comments and risks* – Several generations developed on the Black Boy plants at Rayol-Canadel-sur-Mer, which led to the gradual decline of the trees. By eliminating the attacked host plants, the pest was eradicated. Given its very narrow range of host plants, this insect is not a serious threat to Europe except for the rare *Xanthorrhoeaceae* grown in a few garden in south of France. In case of new introduction, the risk of establishment of this insect is very low.

*Batocera rufomaculata* (Degeer, 1775)
(Lamiinae, Batocerini) (The Mango Tree Borer or Violin) (Fig. 1, 2)

*New interception record* – For several years, a population of this species has been developing on a fig tree within the enclosure of the orang-outangs in the zoo of Munster (Germany) (K. Adlbauer, pers. com.; C. Weimann, pers. com.). The country of origin of the fig tree is not known.

*Origin – B. rufomaculata* is widely distributed in the Far East (China, the Andaman Islands, Myanmar, Ceylon, India, Malaysia, the Seychelles, Pakistan) and it established many years ago in most islands of the Indian Ocean (Madagascar,
Réunion, Mauritius, the Maldives ...), in the Pacific ocean (the Solomon Islands), and in the West Indies (Duffy, 1953, 1968; Balachowsky, 1962; Martinez, 1989).

**Biolog y, Hosts plants** - B. rufomaculata is very polyphagous on deciduous trees and it is a serious pest for nurseries, ornamentals and fig trees (Beeson & Blathia, 1939; Duffy, 1953, 1968; Balachowsky, 1962; Ben Veuhera, 2000).

**Comments and risks** - In 1933, this species was intercepted in England in wood imported from the Andaman Islands, and in 1983, it was intercepted in West Sussex in wood imported from India. Its establishment in southern Europe could be possible as it is already spreading through the eastern Mediterranean area. It occurs in Syria, Lebanon, Israel, Palestine and Turkey (Balachowsky, 1962; Duffy, 1968; Seymour et al., 1985; Martinez, 1989; Tauzin, 1989; Tozlu & Ozisik, 2000).

**Chlorophorus annularis** (Fabricius, 1787)
(Cerambycinae, Clytini) (Bamboo Borer, or Tiger Bamboo Longhorn Beetle) (Fig. 1, 3)

**New interception record** - On August 20th, 2004, three specimens of *C. annularis* emerged at Mesquiers (Loire-Atlantique, France) from a bamboo made piece of furniture imported from India.

**Origin** - India, Cambodia, Malaysia, New Guinea, China, Japan, Thailand, Ceylon (Sri Lanka), Myanmar, Vietnam, Taiwan, Laos (Gahan, 1906; Pascoe, 1864; Greisset, 1942; Duffy, 1933; Greisset et al., 1970).

**Biolog y, Hosts plants** - Harmfulness of *C. annularis* may be negligible and must concern only bamboo made objects (made of *Bambusa spp.*, or *Dendrocalamus spp.* (Poaceae)) as it develops only in decaying plants and finishes its development cycle in manufactured goods. However, the polyphagy of *C. annularis* concerns the following host plants: *Citrus* sp. (Rutaceae), *Dipterocarpus* sp. (Dipterocarpaceae), *Gossypium* sp. (Malvaceae), *Liquidambar* sp. (Hamamelidaceae), *Pyrus* sp. (Rosaceae), *Shorea* sp. (Dipterocarpaceae), *Spondias* sp. (Anacardiaceae), *Tectona* sp. (Verbenaceae), *Vitis* sp. (Vitaceae) (Beeson & Blathia, 1939; Greisset, 1942; Duffy, 1933; Balachowsky, 1963; Greisset et al., 1970).

**Comments and risks** - Interceptions of *C. annularis* were not rare in Europe and they were always tied to the importation of bamboo-made articles. *C. annularis* was often mentioned in Germany, in 1974 in Denmark (M. Christensen, pers. com.), in the British Islands at Buckenham Wood (Lingwood E. Norwich) (M. Reizek, pers. com.), the Czech Republic, Finland, Austria, and Rumania (Salaos, 1940; Fisher, 1942; Heyrovsky, 1951, 1969; Duffy, 1953; Franz, 1959; Harde, 1959; Schmidt, 1962; Elbert, 1969; Horion, 1974; Weidner, 1967, 1982; Heyrovsky & Slama, 1992; Schillhammer, 1994; Steiner, 1997, 1999, 2003; Adlbaeuer, 2001; Neuhuis, 2001; Stock, 2001). These repeated interceptions did not lead to temporary introductions, with one exception, a specimen found at Sant-Cugat-del-Vallés (Barcelona) within a park of the city, on flowers next to bamboo (Vives, 1995). The establishment of *C. annularis* in Europe could be possible in isolated sites within the Mediterranean area.

**Dileg may undulatus** Gahan, 1891
(Cerambycinae, Cerambycini) (Fig. 1, 4)

**New interception record** - On September 20th, 2004 one specimen was found in the quarantine facility of the harbour at Marseille (Bouches-du-Rhône, France) by officers of the Regional Plant Protection Service. This insect was trapped behind the plastic film wrapping a bundle of coco fibers on a pallet imported from Sri Lanka. The insect emerged either from the pallet or it was caught during packaging of the goods.

**Origin** - *D. undulatus* originates from the Far East, in China (Hainan), Myanmar, Thailand, Laos, Indonesia (Java), Ceylon (Gahan, 1906; Beeson & Blathia, 1939; Duffy, 1968; Greisset et al., 1970).

**Biolog y, Hosts plants** - The ecology and the biology of *D. undulatus* are not well known. It was reported from the following host plants: *Actinopora* sp. (Tiliaceae), *Bryra cordylopha* (Willd.) Burret (= ammoniella Roxb.) (Malvacese), *Prunus cerasoides* D. Don. (= pumila (Kingdon-Ward)) (Rosaceae), *Pyrus* sp. (Rosaceae) and *Xylica dolabriformis* Benth. (Fabaceae). Other Dileg any Pascoe, 1836 are polyphagous on trees, shrubs, and liane from various families (Dipterocarpaceae, Fabaceae...) including *Wisteria* sp. (Fabaceae). *D. undulatus* seems to prefer branches previously killed by a buprestis. Its development cycle lasts 1 or 2 years (Beeson & Blathia, 1939; Duffy, 1968; Greisset et al., 1970).

**Comments and risks** - Interception of *D. undulatus* within the quarantine facility means that it won’t spread and establish in the surrounding habitats. Its oriental origin is also incompatible with European establishment.

**Dissectopus cachani** Lepesme & Breuning, 1956
(Cerambycinae, Cerambycini) (Fig. 1, 5)

**New interception record** - On June 2nd, 2001, one specimen of *D. cachani* was caught by P. Tauzin on the slopes of Mount Ossa (Larisa) in Greece.

**Origin** - *D. cachani* originates from Africa (Cameroon, Ivory-Cost, Ghana, Togo, Sudan (K. Adlbauer, pers. com.; J. Sadre pers. com.).

**Biolog y, Hosts plants** - Nothing is known about the ecology of *D. cachani* (*D. dilatus*) (Chevolat, 1856), a close species, lives on *Morus* sp. (Moraceae) (Duffy, 1980).

**Comments and risks** - No explanation can be given about the abnormal presence of *D. undulatus* on the slopes of Mount Ossa. This capture could be the result of a small local infestation.

**Eubria quadrimaculata** (Linneé, 1767)
(Cerambycinae, Eubriini) (Fig. 1, 6)

**New interception record** - In October 2002, one specimen of *E. quadrimaculata* emerged at Quillan (Aude, France) from a bamboo-made stand containing small flakes of spices imported from Martinique (T. Noblecourt leg.).

**Origin** - *E. leptocerus* & Audinet-Serville, 1830 is not known from Martinique but it is known from Guadeloupe (D. Heffern, pers. com.). Its current distribution covers a few Caribbean Islands, Cuba, Puerto Rico (Mona Island), the Virgin Islands (Tortola, Saint-Thomas). Within the French Antilles, it was mentioned once in Guadeloupe. *E. quadrimaculata* is fairly rare and not widely distributed. In 1975, it was not known from Cuba yet, and it is not known from Jamaica (Chemask, 1966; Zayas, 1975; Villiers, 1980; Monne & Hovore, 2001; Vitali & Rezban Zarader, 2003; Chalumeau & Toullbar, 2005).

**Biolog y, Hosts plants** - The ecology of *E. quadrimaculata* is not well known. The adult has a nocturnal activity. Very likely, as many *Eubria*, it may be very polyphagous in dying or decaying wood. Its development cycle and damage are similar to those of *Stronstoma Audinet-Serville, 1834*.

**Comments and risks** - One cannot assert that *E. quadrimaculata* is new for Martinique since the real origin of the bamboo it emerged from is uncertain. The remaining doubt concerning a confusion or synonymy with *E. bunodosa*
New interception record – On July 26th, 1992 one specimen of *E. mucronatum* was caught on a flower at San-Fernando, Cadiz province (Andalusia, Spain) (A. Verdugo leg.).

**Origin – E. mucronatum** is native to the U.S.A. (Linsley, 1963).

**Biology, Hosts plants – E. mucronatum** is very polyphagous and lives in dying or dead branches of many deciduous trees, oaks, hackberries, beech trees, maple trees... The insect develops in 2 years. It is crepuscular and nocturnal: its diurnal occurrence on a flower was unusual (Duffy, 1953; Linsley, 1963).

**Comments and risks –** This species was introduced occasionally in the British Islands in wood imported from North America (Duffy, 1953). *E. mucronatum* was discovered 15 km away from Cadiz, and very likely, its introduction pathway can be associated with the intensive traffic of goods in the Cadiz harbor. It is not known if the found specimen was imported itself, or if it is an individual belonging to a small pioneer population established locally. Given the particular climate of Andalusia, the establishment of *E. mucronatum* is possible in that area. Some monitoring is recommended to determine the status of the pest in this region. *E. mucronatum* can also be a pest in timber and wooden furniture.

**Frea marmorata** Gerstaeker, 1871
(Lamiinae, Cossinini) (Fig. I, 8)

New interception record – On June 20th, 1985 three specimens of *F. marmorata* and one specimen of *Niphona piceicornis* Mulsant, 1839 were found by R. Zange in Dubrovnik (Croatia) (S. Steiner, pers. com.).

**Origin – F. marmorata** is known from Eastern Africa (Kenya, Malawi, Tanzania and Zimbabwe) (Breuning, 1942; Duffy, 1957; Sudre & Tiecchi, 2002).

**Biology, Hosts plants – F. marmorata** was mentioned as a pest on the coffee tree, *Coffea arabica* L. (Rubiaceae) (Breuning, 1942; Vaysseire, 1955; Duffy, 1957).

**Comments and risks –** The discovery and presence of 3 specimens of *F. marmorata* simultaneously in the Croatian port is still an enigma. Very likely, the pest has no chance to establish in Europe.

**Minectata meridiana** (Matsushita, 1933)
(Lamiinae, Rhodopini) (Fig. I, 9)

New interception record – In late 2001, several specimens of *M. meridiana* were found as debris in a container of Cycas fruits, and in 2002 three adults emerged from Cycas fruits imported from Japan (R. Germain leg.). The discovery was made at La Méniltré near Ploërmel (Morbihan, France) by a nurseryman. The infested fruits were imported from Naze (Amami-Oshima Island) in the Ryukyu archipelago.

**Origin – M. meridiana** is native to the southern isalnds of the Ryukyu archipelago (Breuning & Villiers, 1973; Breuning, 1979; Ohbayashi et al., 1992).

**Biology, Hosts plants –** The specimens found at La Méniltré were developing within the endocarp of Cycas fruits but they did not seem to damage the mesocarp or to affect the germinative capacities of the seeds. This observation matches up the known elements of the biology of the insect. *M. meridiana* can attack other tender parts of *Cycas revoluta* Thumb. (Cycadaceae), and can also attack other host plants as fig trees and mulberry trees (Koike, 1971; Kato, 2001).

**Comments and risks –** *M. meridiana* is not a quarantine species, and the probability of its establishment in Europe is low, although not totally impossible, at least within the Mediterranean and the Atlantic areas.

**Monochamus alternatus** Hope, 1842
(Lamiinae, Monochamini)
(Japanese Pine Sawyer or Rusty Pine Longhorn Beetle) (Fig. II, 1)

New interception record – One specimen was discovered at Guentersdorf (Saxonia-Anhalt, Germany) in the building site of a supermarket (B. Altschner leg.). It emerged from wooden packing material containing stones imported from China. Several exit holes were noticed before the wooden material was destroyed. The discovery of the pest was communicated to the Plant Protection authorities (EPPO/OEPP, 2003).

**Original Distribution – M. alternatus** is native to South Eastern Asia, China, Hong-Kong, Formose, Laos, Vietnam, Japan (Duffy, 1968; Gressitt et al., 1970).


**Comments and risks –** Potentially, *M. alternatus* is a serious pest of many forests and plantations of conifers. As a quarantine species and a major vector of the pinewood nematode, *Bursaphelenus xylophilus* Steiner & Buhner, 1934 (Aphelechnoidea), *M. alternatus* is a serious threat for the European forests of conifers. It was intercepted in Irish ports. In Czech Republic, it was obtained from wood imported from China, and it was collected in a factory importing plywood from Iran. The pest could establish in many regions of Europe and in France on many conifers including Cupressaceae (Steiner & Buhner, 1934; Heyovsky, 1965; Duffy, 1968; Ashe et al., 2002; Heyovsky & Slama, 1992). In 1999, *B. xylophilus* was accidentally introduced in Portugal; very strict control measures were used to eradicate the pest and to avoid its spread throughout other countries of the European Community (Evans et al., 1996; Sousa et al., 2002). Many species of the *Monochamus* genus were intercepted in U.K. but *M. alternatus* was not among them (Duffy, 1953).

**Monochamus rosenwilleri** Cederholm, 1798
(Lamiinae, Monochamini) (Pine Sawyer) (Fig. II, 2)

New interception record – On May 2nd, 2006 one specimen of *M. rosenwilleri* was found at Åseda (Småland, Sweden) by R. Karlsson (B. Gustafsson, pers. com.)

**Origin – M. rosenwilleri** is native to a large area from European part of Russia to Siberia and Sakhalin, northern China and Mongolia, Korean Peninsula and Japan (Sama, 2002).

**Biology, Hosts plants – M. rosenwilleri** mainly attacks conifers but it can also develop successfully in aspen and birch trees (Yanovskii & Baranchikov, 1999).

**Comments and risks –** Earlier interceptions or introductions of *M. rosenwilleri* were mentioned in Czech Republic, Hungary, and Austria. Several times, it was intercepted in U.K. in wood imported from Scandinavia, at Hamburg (Germany) (as *M. quadricornatus* Motschulsky, 1848), and in 1973 in Bulgaria (Duffy, 1953; Tsankov, 1975; Weidner, 1982; Kovacs & Hegvessy, 1992; Holzegel, 1995; Šefrova & Laštůvka, 2003). Like all
other *Monochamus* species originating from an area outside the European Community, *M. rosennelii* is a quarantine species. Sweden authorities were alerted to make sure that no infestation by this pest was developing in that country. *M. rosennelii* is a synonym of *M. urassovii* Fischer, 1806. However, some authors consider it as a form of *M. sartor* (Fabricius, 1787) because of their similarity in terms of genetics and karyotype (Gissert et al., 2004). In contrast, P. Svea (SAMA, 2002) thinks that *M. rosennelii* is a valid species, clearly distinct from *M. sartor*.

*Niphona hookeri* Gahan, 1900
(Lamiinae, Proceroplini)
(Tawny Brown Bamboo Longhorn Beetle) (Fig. II, 3)

New interception record – On March 15th, 2006, one specimen of *N. hookeri* was intercepted at Luleå, Sweden (Collection S. Lundberg). It emerged from a *Cissus* sp. plant (Vitaceae) (S. Lennartsson, pers. com.). Another specimen found in the collection of the Natural History Museum in Stockholm, originates from Arvidsjaur (Sweden) where it emerged in 1990 from a bamboo (S. Lennartsson, pers. com.).

*Original Distribution – N. hookeri* is native to southern and eastern Asia (India, the Andaman Islands, China, Laos, Myanmar, Hong Kong) (Beeeson & Bhattachar, 1939; Gressett, 1942; Duffy, 1953, 1956; Gressett et al., 1970).

*Biology, Hosts plants – N. hookeri* is considered as a pest of bamboos but the adults can also consume leaves and tender bark of *Citrus* spp. (Rutaceae). Its biology is not well known. The insect develops one generation a year. The adults show a nocturnal activity and feed upon tender bark of various trees and shrubs. The larvae consume dry bamboo (Beeeson & Bhattachar, 1939; Gressett, 1942; Duffy, 1953, 1956; Gressett et al., 1970; Haute et al., 1996).

*Comments and risks – Several times N. hookeri was intercepted in U.K. (Duffy, 1953, 1968). Because of its particular climatic requirements, its establishment in Europe seems to be unlikely. N. furcuta (Bates, 1873), which also lives in bamboo was intercepted in Germany (Brandt, 1957).*

*Pachydissus sericus* Newman, 1838
(Cerambycinae, Cerambycini)
(Silvery Longicorn or Silvery Brown Longicorn) (Fig. II, 4)

New interception record – On July 6th, 2004 one mutilated but living specimen of *P. sericus* was found at Volvic (Puy-de-Dôme, France), in the city centre, under lamp posts.

*Origin – P. sericus is endemic to Australia (Duffy, 1963; Hawksworth, 1987, 1993).*

*Biology, Hosts plants – P. sericus develops in various Mimosaaceae spp., Myrtaceae (including *Eucalyptus siderophloia* F. Mull., *E. leucoxylon* F. Mull. and *E. crebra* F. Mull.), Proteaceae and Meliaceae, but it has a strong preference for dying or dead branches of *Acacia longifolia* (A. Wildenow) (Duffy, 1963; Hawksworth, 1987, 1993).

*Comments and risks – The establishment of *P. sericus* would be possible in Europe where *Eucalyptus* spp. are grown, following the establishment of various *Phoracantha* spp. occurring already in the Mediterranean area. The presence of *P. sericus* in Volvic is still an enigma.*

*Stromatium longicorne* Newman, 1842
(Cerambycinae, Hesperophaniini) (Fig. II, 5)

New interception record – In July 1996, at La Ciotat (Bouches-du-Rhône, France), a specimen of *S. longicorne* emerged from a piece of furniture the wood and the origin of which are unknown (A. Chaminade leg.). It is also believed that this species is responsible for heavy damage to floorboards imported in the Toulouse area (Haute-Garonne, France) (L. Valladares pers. com.).

*Origin – Assam, Myanmar, Southeastern Asia, the Malay archipelago, Philippines, Hainan (Southern China), Taiwan, Laos, Thailand, Loocoo Island in the Ryukyu archipelago (Japan), the Bonin Islands (Japan), Borneo, Sulawaisi (Indonesia), Ceram and Ambon Islands in the Maluku archipelago (Indonesia), Bacoan Island, Malaysia, Java, New Guinea, Sumatra, and Australia where it was accidentally introduced (Gahan, 1906; Duffy, 1963, 1968; Gressett et al., 1970).

*Biology, Hosts plants – *S. longicorne* develops in dead wood, and timber of Arogeissus acuminate Wall. (Combretaceae), Capressus sp. (Cupressaceae), Irvingia barandiana Pierre (Irvingiaceae), Sorens sp. (Dipterocarpaceae). Its development cycle lasts at least 3 years (Duffy, 1963, 1968; Gressett et al., 1970).*

*Comments and risks – S. longicorne was previously intercepted in the British Islands, at Glasgow and London from goods imported from the Far East (Duffy, 1953). As its larvae live in dry wood and need several years to develop, the adults can emerge from pieces of furniture several years after they were manufactured and imported. It is not known if *S. longicorne* could establish on the long term in southern Europe. It could develop in storage sites of wooden made products, or in timber, and it could show damage to goods several years after their importation.*

*Stromatium barbatum* (Fabricius, 1775) is a close-related species, which was intercepted repeatedly in Europe, in Spain, England, Scotland, and Finland (Enderle, 1937, 1939, 1940; Saalas, 1939; Beeeson & Bhattachar, 1939, Duffy, 1953, Vives, 1953).

*Tithocera jaspidea* Audinet Serville, 1835
(Lamiinae, Ceropelini) (Fig. II, 6)

New interception record – One specimen of *T. jaspidea*, collected in July 1986, at Biar-sur-Cère (Lot, France), was found recently by P. Zagari in G. Lemperière's collection.

*Origin – T. jaspidea is native to eastern Africa and Sable. It is present but rare from Sudan to Algeria, and it is fairly abundant in southern Morocco (in the former Spanish Sahara). It is also known from Abyssinia to the Transvaal (Breuning, 1937; Mateu, 1972, Duffy, 1980).*

*Biology, Hosts plants – T. jaspidea develops essentially in dying wood or freshly cut wood of *Acacia raddiana* Savi (Mimosaceae) (Mateu, 1972; Duffy, 1980).*

*Comments and risks – As the host trees of *T. jaspidea* are not much used for any woodwork, the insect is not highly subject to exportation, which makes its presence in the Lot department (France) even more incomprehensible. The interception of this species is an enigma unless the insect was accidentally caught in some crate used for the importation of goods from its original area.*

*Trichoferus canestra* Faldermann, 1835
(Cerambycinae, Hesperophaniini) (Fig. II, 7)

New interception record – In June 2002, about ten specimens of *T. canestra* emerged in the quarantine facility of Marseille harbour (Bouches-du-Rhône, France). They were found in timber of *Salix* sp. that was received in August 2001 from China and stored in the quarantine before being used to make wooden packaging material.
Origins — *T. campestris* is native to a vast area from Central Asia (Turkistan) through China, Korea, and Japan (Gressitt, 1951).

**Biology, Hosts plants** — *T. campestris* develops in dry wood of many deciduous tree species. It consumes preferably dead or drying portions of trunks and branches (Iwata & Yamada, 1990).

**Comments and risks** — *T. campestris* is a quarantine species in the U.S.A. and Canada where it was intercepted on several occasions. In 1997, it developed a small infestation in a storage site in New Brunswick (EPPO/OEP, 2002b; APHIS, 2003). If *T. campestris* would establish in Europe, it would be able to spread to biodiversity in forests, but it would also be a very serious threat to timber.

**Urophisin fasciatus** (Degeer, 1775)
(Lamiinae, Acanthocinini) (Fig. II, 8)

**New interception record** — In June 1991, P. Berger caught 4 females of *U. fasciatus* at Rognac (Bouches-du-Rhône, France) (P. Berger pers. com.).

**Origins** — *U. fasciatus* is native to eastern U.S.A. (Linsley & Chemsak, 1995).

**Biology, Hosts plants** — *U. fasciatus* develops in many deciduous trees: birch tree, hornbeam, chestnut tree, maple tree, beech tree, sweetgum, magnolia, walnut tree, black walnut, elm tree, pear tree, apple tree, sumac, lime tree (Linsley & Chemsak, 1995).

**Comments and risks** — The presence of *U. fasciatus* at Rognac (France) still remains unexplained. Some monitoring should be conducted locally to determine if an infestation by this pest is developing. Its establishment in France and elsewhere in Europe could happen; a risk analysis should be made to determine the threat it would represent ecologically and economically.

**Xyloscheius gryii** (White, 1835)
(Cerambycinae, Cyltini) (Fig. II, 9)

**New interception record** — In March 2003, one damaged specimen of *X. gryii* was found in a piece of furniture imported from China. The exact locality of the discovery in the Paris region (France) is not known (H. P. Aberlenc pers. com.).

**Origins** — *X. gryii* occurs in China, Formose, and in Japan, with 2 sub-species. It is also found in the Mariana Islands (Duffy, 1968; Ohbayashi et al., 1992).

**Biology, Hosts plants** — *X. gryii* is polyphagous on *Coffea arabica* L. (Rubiaceae), *Paulownia tomentosa* Steud. (Scrophulariaceae) and *Tectona grandis* L. (Verbenaceae) (Gressitt, 1951; Duffy, 1968; Ohbayashi et al., 1992).

**Comments and risks** — In China, *X. gryii* is a pest of *Lonicerajaponica* Thunb. (Caprifoliaceae), a honeysuckle used as trap plant around cotton fields, and in the U.S.A. it is a beneficial insect on the same host plant *L. japonica* which is considered as an invasive weed in this region where it was introduced as an ornamental (Tian et al., 1986; Coombes 1991). In Europe, the risk of establishment of *X. gryii* as a pest seems to be low.

**Updated information**

**Anoplophora chinensis** (Forster, 1771)
(Lamiinae, Lamiini) (Citrus Longhorned Beetle) (Fig. III, 1)

COQUEMPOT & HÉRARD (2003) and COQUEMPOT et al. (2003) presented a summary of the interceptions and introductions of *A. chinensis* in Europe. Some new data and literature review were given. A summary of the control and eradication measures was presented by Herrad et al. (2005).

- **Austria**: Interceptions were mentioned at Villach (Steiner, 1997; 1999; 2005) and at Klagenfurt (Schmidt & Schmidt, 1990).
- **England**: It was intercepted at Wreclesham (Surrey) (Seymour & Kilby, 1979), in Dorset (Seymour et al., 1986) and in 2005 and 2006, in Lancashire and in southern England in various lots of bonsais imported from Japan and China. According to the Department of Environment, Food and Rural Affairs, these interceptions are due to massive importations of bonsais (*Acer sp.*) from China (41,000 and 46,000 plants) (GNR, Government News Network, 2005; EPPO/OEP, 2006).
- **France**: It was not recovered during the years following the first finding in 2003 at Soynons (Ardèche, France); its eradication may have been successful.
- **Germany**: It was not recovered in this country since its first mentions in Berlin and Aachen (Schmidt & Schmidt, 1990).
- **Italy**: A specimen of *A. chinensis* was collected in 1994 by G. Veronesi at Gironico near Udine in a nursery, which was closed recently; it was also found in P. Rapuzzi's collection (G. Sama, pers. com.; P. Rapuzzi, pers. com.). The first known infestation of *A. chinensis* in Italy (Colombo & Limonta, 2001) is extent on about 100 km² around Parabiagi (Italy) from Milan through Varese; it is now considered as irreversible. Obviously, the pest spreading is under control and eradication process is still in progress, but until now is not contained; living adults were found recently in high numbers in one park within Milan (P. Hérad, pers. com.; M. Maspero, pers. com.; EPPO/OEP, 2006).
- **The Netherlands**: *A. chinensis* larvae were found in roots of bonsais in 1980 (Rossem et al., 1981), and one adult specimen emerged in 2003 from a maple tree imported from Japan and planted in a private yard. Dutch authorities surveyed the concerned area to search for a possible ongoing infestation (van Opstal in litteris, 2003; EPPO/OEP, 2004c); the survey was negative (EPPO/OEP, 2004).
- **Poland**: Very likely, the mention of *A. glabrifrons* (Motschulsky, 1853) from a bonsai in Poland is an error; rather *A. chinensis* may have emerged from this plant material (Bialorucki, 2003; EPPO/OEP, 2004).
- **Switzerland**: An introduction with imported bonsais (*Acer palmatum* Thunberg) was found recently in northern Switzerland (Argovia) (Wermeling, 2006).

*A. chinensis* is considered as one of the most damaging pests of Citrus spp. in China (Gressitt, 1942; Duffy, 1968). In Europe, *A. chinensis* represents a serious threat to ornamentals in urban sites, to orchards, and to forests of deciduous trees, especially in the Mediterranean area. Since its introduction in Italy, this invasive pest has made heavy damage to many ornamental trees and shrubs; its range of host plants appears to be very large (Lingafelter & Hoebeke, 2002; Coquempot & Hérard, 2003; Coquempot et al., 2003).

**Anoplophora glabrifrons** (Motschulsky, 1853)
(Lamiinae, Lamiini) (Asian Longhorned Beetle) (Fig. III, 2)

An update of the interceptions and introductions of *A. glabrifrons* in Europe was published (Coquempot & Hérard, 2003; Coquempot et al., 2003).

- **Austria**: At Braunau, the eradication of the infestation was not achieved yet. The discovery of infested trees 4 km apart of the initial infestation suggests that the pest may have spread in hidden places and possibly got out of control (Krehn, 2003).
C. torrida (Olivier, 1795) must stay a synonym of C. spinicornis (Fabricius, 1775). According G. Sama (pers. com.), the primary homonymy with Elaphidion spinicornne (Drury, 1773), denounced by Vitali & Reznikovai-Reser (2003) is not valid. Some data on C. spinicornis distribution and ecology are given by Duffy (1957, 1980).

Philematium currori (White, 1853)
(Cerambycinae, Callichromatini) (Fig. III, 5)

Italy: K. Addlbauer identified as P. currori the specimens imported from Ivory Coast and found in Venice harbour (Ratti, 1990). P. currori is a polyphagous species native to Ethiopia, the Congo and Uganda (Duffy, 1957, 1980; Addlbauer et al., 2006).

Phoracantha recurva Newman, 1840
(Cerambycinae, Phoracanthini)
(Eucalyptus Longhorned Borer) (Fig. III, 6)

Cadaïa (1980, 1986) considered that this species established in southern Europe during the eighties.

France: According Orousset (2000), P. recurva could occur already in France and may be discovered soon.

Greece: P. recurva was found in Greece (Cerny, 2002; Coquemphot & Sama, 2004).

Italy: P. recurva was found in Italy (Sama & Bocchini, 2003; Palmari & Camoyle, 2006; Mazzeo & Siscaro, 2007).

Malta: P. recurva was found in Malta (Mifsud, 2002).

Spain: P. recurva was found in southern Spain, in Seville, Cadiz, following a prior mention in Ceuta (North Africa) (Bercero & Bahillo, 1998, 1999; Ruiz & Barranco, 1998; Verduco, 1999, 2000; Verdugo & Lopez, 2001; Barreda & Navarro, 2002; Alvarez Perez, 2004); now, the pest occurs in the Aragon region (Murria Beltran & Murria Beltran, 2006).
Fig. II - Monochamus alternatus (1), Monochamus rosaeculleri (2), Niphona hookeri (3), Pachydiscus sericus (4), Stromatium longicorne (5), Tiloceres başvuru (6), Trichoferus cuneatus (7), Urographis fasciatus (8), Xylocerus grayii (9).