

International Plant Protection Convention Compiled comments with steward's responses – 2013-002: Draft Annex to ISPM 27 - Conotrachelus nenuphar

(1 July - 30 September 2017)

2013-002: DRAFT ANNEX TO ISPM 27: CONOTRACHELUS NENUPHAR

Summary of comments

Name	Summary
Cuba	No hay comentarios al PD
ΕΡΡΟ Σ	Finalised by the EPPO Secretariat on behalf of its 51 Member Countries.
European Union	Comments finalised by the European Commission on behalf of the EU and its 28 Member States on 29/09/2017.
Samoa	no further comments
South Africa	No comments from the National Plant Protection Organisation of South Africa.

#	Para	Text	Comment	SC's response
1	G	(General Comment)	Cameroon Le Ptrotocole est complet, détaillé et richement illustré. Il vient comme outil pertinent dans l'arsenal des protocoles de diagnostic. Devrait etre adopté Category: TECHNICAL	NOTED
2	G	(General Comment)	Myanmar This pest is absent in Myanmar. Category: SUBSTANTIVE	NOTED
3	G	(General Comment)	Peru We agree with the Draft annex to ISPM 27: Conotrachelus nenuphar (2013-002) Category: TECHNICAL	NOTED
4	G	(General Comment)	Canada Canada supports the draft annex to ISPM 27: Conotrachelus nenupar (2013-002). Category: SUBSTANTIVE	NOTED
5	G	(General Comment)	Nicaragua Nicaragua considera que el diagnóstico morfológico a través de claves es confiable más para adultos; no así para la identificación de larvas y pupas. Se apoya el uso de métodos moleculares para este diagnóstico. Category: TECHNICAL	"Nicaragua considers that the morphological diagnosis through keys is more reliable for adults; not so for the identification of larvae and pupae. It supports the use of

#	Para	Text	Comment	SC's response
				molecular methods for this
				diagnosis."
				The authors agree that this would
				be beneficial in revisions of the
				protocol, but currently no molecular method has been proposed to
				identify this pest. Therefore, the
				authors could not include a
-	-	(C-11-11-1 C-11-11-11-11-11-11-11-11-11-11-11-11-11	Communication	molecular test in current DP
6	G	(General Comment)	Guyana Guyana has no objection to this Annex	NOTED
			Category : SUBSTANTIVE	
7	G	(General Comment)	Panama	NOTED
			Panama has no comments on this document.	
8	G	(Conoval Commont)	Category : EDITORIAL Tajikistan	NOTED
8	G	(General Comment)	I support the document as it is and I have no comments	NOTED
			Category : SUBSTANTIVE	
9	G	(General Comment)	Bahamas	NOTED
			Research suggests that the Conotracheus nenuphar is	
			restricted to North America and is not likely to be a global invasive species by virtue of its life cycle. However, C.	
			nenuphar does pose a phytosanitary risk to the region. To	
			this end, the Bahamas supports the adoption of this	
			diagnostic protocol. Category: TECHNICAL	
10	G	(General Comment)	Uruguay	NOTED
		(Serielal Seriment)	We do not have comments on this draft DP	
			Category: TECHNICAL	
11	G	(General Comment)	Thailand	NOTED
			agree with the proposed draft DP for Conotrachelus nenuphar	
			Category : SUBSTANTIVE	
12	G	(General Comment)	Lao People's Democratic Republic	NOTED
			Lao PDR agreed with this drafted ISPM.	
13	G	(General Comment)	Category : SUBSTANTIVE Honduras	NOTED
		(concrat community)	HONDURAS NO TIENE COMENTARIOS	
			Category: TECHNICAL	
14	G	(General Comment)	Colombia	NOTED
			El Instituto Colombiano Agropecuario (ICA), como Organización Nacional de Protección Fitosanitaria de	
			Colombia, revisó y analizó el borrador en cuestión,	
			encontrando que el protocolo de diagnóstico propuesto	

Para	Text	Comment	SC's response
		cumple con los requisitos y esta actualizado de acuerdo con la evidencia científica existente. Category : TECHNICAL	
G	(General Comment)	Algeria No comment Category: TECHNICAL	NOTED
27	Mr Charles W. O'brien <u>O'Brien</u> (US, lead author)	United States of America Correct spelling Category : EDITORIAL	Incorporated.
33	The inclusion of DNA methods was considered but removed from this version. The methods have not been published prior to reporting in the protocol.	Nicaragua Nicaragua: Estamos de acuerdo que el método de PCR sea incluido, hasta que sea publicado. Category: TECHNICAL	NOTED
43	The weevil <i>Conotrachelus nenuphar</i> (Herbst) (Coleoptera: Curculionidae) is a native fruit pest in eastern North America, where its main hosts include native and exotic rosaceous plant species (Chapman, 1938; CABI, 2017). It is an agricultural pest of orchard fruit — especially <i>Prunus</i> spp. (plums, peaches, nectarines, cherries), <i>Malus pumila</i> (apples), <i>Pyrus communis</i> (pears) and <i>Vaccinium corymbosum</i> (blueberries) (Quaintance and Jenne, 1912; Chapman, 1938). The adult beetles will feed on the fruits of many other kinds of plants including <i>Cydonia oblonga</i> , <i>Diospyros kaki</i> , <i>Fragaria</i> × <i>ananassa</i> , <i>Ribes</i> spp. and <i>Vitis</i> spp., Rosaceae (including <i>Sorbus aucuparia</i> , <i>Amelanchier arborea</i> , <i>Crataegus</i> spp.) and if given the opportunity will even feed on tropical fruits (Quaintance and Jenne, 1912; Chapman, 1938; Hallman and Gould, 2004). <i>C. nenuphar</i> discriminates among these potential food sources and prefers <i>Prunus</i> spp. <i>M. pumila</i> and <i>P. communis</i> (Jenkins <i>et al.</i> , 2006; Leskey and Wright, 2007). Females will oviposit in these fruits, and larvae can successfully develop in any of them. Larvae have been known to develop in fungal black knot (<i>Plowrightia morbosa</i>) on <i>Prunus avium</i> (Quaintance and Jenne, 1912; Jenkins <i>et al.</i> , 2006).	Viet Nam https://www.eppo.int/QUARANTINE/data_sheets/insects/C ONHNE_ds.pdf Category: TECHNICAL	Modified. The suggested plants are now included in modified sentences: "The adult beetles will feed on the fruits of many other kinds of rosaceous plants (including Cydonia oblonga, Fragaria × ananassa, Sorbus aucuparia, Amelanchier arborea, and Crataegus spp.), nonrosaceous plants (including Diospyros kaki, Ribes spp. and Vitis spp.) and, if given the opportunity, tropical fruits (Quaintance and Jenne, 1912; Chapman, 1938; Hallman and Gould, 2004)."
43	The weevil <i>Conotrachelus nenuphar</i> (Herbst) (Coleoptera: Curculionidae) is a native fruit pest in eastern North America, where its main hosts include native and exotic	Viet Nam Category: TECHNICAL	Incorporated.
	G 27 33 43	G (General Comment) 33 The inclusion of DNA methods was considered but removed from this version. The methods have not been published prior to reporting in the protocol. 43 The weevil Conotrachelus nenuphar (Herbst) (Coleoptera: Curculionidae) is a native fruit pest in eastern North America, where its main hosts include native and exotic rosaceous plant species (Chapman, 1938; CABI, 2017). It is an agricultural pest of orchard fruit – especially Prunus spp. (plums, peaches, nectarines, cherries), Malus pumila (apples), Pyrus communis (pears) and Vaccinium corymbosum (blueberries) (Quaintance and Jenne, 1912; Chapman, 1938). The adult beetles will feed on the fruits of many other kinds of plants including Cydonia oblonga, Diospyros kaki, Fragaria × ananassa, Ribes spp. and Vitis spp., Rosaceae (including Sorbus aucuparia, Amelanchier arborea, Crataegus spp.) and if given the opportunity will even feed on tropical fruits (Quaintance and Jenne, 1912; Chapman, 1938; Hallman and Gould, 2004). C. nenuphar discriminates among these potential food sources and prefers Prunus spp. M. pumila and P. communis (Jenkins et al., 2006; Leskey and Wright, 2007). Females will oviposit in these fruits, and larvae can successfully develop in any of them. Larvae have been known to develop in fungal black knot (Plowrightia morbosa) on Prunus avium (Quaintance and Jenne, 1912; Jenkins et al., 2006). 43 The weevil Conotrachelus nenuphar (Herbst) (Coleoptera: Curculionidae) is a native fruit pest in eastern North	cumple con los requisitos y esta actualizado de acuerdo con la evidencia científica existente. Category: TECHNICAL Algeria No comment Technical Suleria (Category: TECHNICAL) Wire Charles W. G'brien-O'Brien (US, lead author) The inclusion of DNA methods was considered but removed from this version. The methods have not been published prior to reporting in the protocol. The wevil Conotrachelus nenuphar (Herbst) (Coleoptera: Curculionidae) is a native fruit pest in eastern North America, where its main hosts include native and exotic rosaceous plant species (Chapman, 1938; CABI, 2017). It is an agricultural pest of orchard fruit – especially Prunus spp. (plums, peaches, nectarines, cherries), Malus pumila (apples), Pyrus communis (pears) and Vaccinium corymbosum (blueberries) (Quaintance and Jenne, 1912; Chapman, 1938). The adult beetles will feed on the fruits of many other kinds of plants including Cydonia oblonga, Diosyryox kaki, Fragaria × amansaus, Ribes spp. and Vitis spp., Rosaceae (including Sorbus aucuparia, Amelanchier arborea, Crataegus spp.) and if given the opportunity will even feed on tropical fruits (Quaintance and Jenne, 1912; Chapman, 1938; Hallman and Gould, 2004). C. nenuphar discriminates among these potential food sources and prefers Prunus spp. M. pumila and P. communis (Jenkins et al., 2006; Leskey and Wright, 2007). Females will oviposit in these fruits, and larvae can successfully develop in any of them. Larvae have been known to develop in fungal black knot (Plowrightia morbosa) on Prunus avium (Quaintance and Jenne, 1912; Jenkins et al., 2006). The weevil Conotrachelus nenuphar (Herbst) (Coleoptera: Curculionidae) is a native fruit pest in eastern North America, where its main hosts include native and exotic

#	Para	Text	Comment	SC's response
		an agricultural pest of orchard fruit – especially <i>Prunus</i> spp.		
		(plums(apricots, plums, peaches, nectarines, cherries), Malus		
		pumila (apples), Pyrus communis (pears) and Vaccinium		
		corymbosum (blueberries) (Quaintance and Jenne, 1912;		
		Chapman, 1938). The adult beetles will feed on the fruits of		
		many other kinds of plants including Cydonia oblonga,		
		$Diospyros\ kaki,\ Fragaria imes ananassa,\ Ribes\ spp.\ and\ Vitis$		
		spp., and if given the opportunity will even feed on tropical		
		fruits (Quaintance and Jenne, 1912; Chapman, 1938;		
		Hallman and Gould, 2004). C. nenuphar discriminates		
		among these potential food sources and prefers Prunus spp.		
		M. pumila and P. communis (Jenkins et al., 2006; Leskey and		
		Wright, 2007). Females will oviposit in these fruits, and		
		larvae can successfully develop in any of them. Larvae have		
		been known to develop in fungal black knot (Plowrightia		
		morbosa) on Prunus avium (Quaintance and Jenne, 1912;		
		Jenkins et al., 2006).		
20	43	The weevil Conotrachelus nenuphar (Herbst) (Coleoptera:	China	Incorporated.
		Curculionidae) is a native fruit pest in eastern North	General rule for scientific writing. Category: EDITORIAL	
		America, where its main hosts include native and exotic	Category , EDITORNIE	
		rosaceous plant species (Chapman, 1938; CABI, 2017). It is		
		an agricultural pest of orchard fruit – especially <i>Prunus</i> spp.		
		(plums, peaches, nectarines, cherries), Malus pumila		
		(apples), Pyrus communis (pears) and Vaccinium		
		corymbosum (blueberries) (Quaintance and Jenne, 1912;		
		Chapman, 1938). The adult beetles will feed on the fruits of		
		many other kinds of plants including Cydonia oblonga,		
		$Diospyros\ kaki,\ Fragaria imes ananassa,\ Ribes\ spp.\ and\ Vitis$		
		spp., and if given the opportunity will even feed on tropical		
		fruits (Quaintance and Jenne, 1912; Chapman, 1938;		
		Hallman and Gould, 2004). C. nenuphar discriminates		
		among these potential food sources and prefers <i>Prunus</i> spp.		
		M. pumila and P. communis (Jenkins (Jenkins et al., 2006;		
		Leskey and Wright, 2007). Females will oviposit in these		
		fruits, and larvae can successfully develop in any of them.		
		Larvae have been known to develop in fungal black knot		

#	Para	Text	Comment	SC's response
		(Plowrightia morbosa) on Prunus avium (Quaintance and		
		Jenne, 1912; Jenkins et al., 2006).		
21	43	The weevil <i>Conotrachelus nenuphar</i> (Herbst) (Coleoptera:	PPPO	Incorporated.
		Curculionidae) is a native fruit pest of fruits in eastern North	Category : EDITORIAL	
		America, where its. Its main hosts include native and exotic	Category . EDITORIAL	
		rosaceous plant species (Chapman, 1938; CABI, 2017). It is		
		an agricultural pest of orchard fruit – especially <i>Prunus</i> spp.		
		(plums, peaches, nectarines, cherries), Malus pumila		
		(apples), Pyrus communis (pears) and Vaccinium		
		corymbosum (blueberries) (Quaintance and Jenne, 1912;		
		Chapman, 1938). The adult beetles will feed on the fruits of		
		many other kinds of plants including Cydonia oblonga,		
		$Diospyros\ kaki,\ Fragaria imes ananassa,\ Ribes\ spp.\ and\ Vitis$		
		spp., and if given the opportunity will even feed on tropical		
		fruits (Quaintance and Jenne, 1912; Chapman, 1938;		
		Hallman and Gould, 2004). C. nenuphar discriminates		
		among these potential food sources and prefers <i>Prunus</i> spp.		
		M. pumila and P. communis (Jenkins et al., 2006; Leskey and		
		Wright, 2007). Females will oviposit in these fruits, and		
		larvae can successfully develop in any of them. Larvae have		
		been known to develop in fungal black knot (<i>Plowrightia</i>		
		morbosa) on Prunus avium (Quaintance and Jenne, 1912;		
22	44	Jenkins <i>et al.</i> , 2006).	PPPO	Theoremore
22	44	The adults feed onon the fruit, and the larvae develop within,	PPPO	Incorporated.
		the fruit of these plants. Crop damage arises as a result of	Category : EDITORIAL	
		oviposition sites on the fruit and adult as well as larval		
		feeding on fruits. The adult feeding punctures often deform		
		the fruit and open the skin to further damage by other insect		
		pests or to fungal attacks. The developing larvae consume the flesh of the fruit and cause the fruit to drop from the tree		
		before ripening. Fully developed larvae leave the dropped		
		fruit through exit holes and burrow into the soil to pupate.		
		All forms of fruit damage are problems for fresh market		
		fruits, and premature drop prevents the fruit from being used		
		as a processed food item.		
		as a processed rood hell.		

#	Para	Text	Comment	SC's response
23	45	There are two phenological strains of <i>C. nenuphar</i> in its native range: a northern strain and a southern strain. The number of generations per year is a defining characteristic of the strains. The northern strain of <i>C. nenuphar</i> must diapause to become reproductively mature (obligate diapause) and has a single generation per year, with adults entering diapause in the late summer and early autumn before female reproductive features have developed. The <i>C. nenuphar</i> southern strain usually has only one generation per year but can develop reproductively and have a second, or even in rare cases, a third generation in a single season (facultative diapause) (Smith and Salkeld, 1964). For this reason, summer- and autumn-harvested fruit may have viable larvae in them in the southeastern United States of America, although this is rare.	United States of America Suggest adding more references to this paragraph. Category: TECHNICAL	Modified. Additional references for Zhang et al. (2008) Ann Entomol Soc. Am. 101: 824-832., Zhang & Pfeiffer (2008) Environmental Entomology37: 1208-1213, and Chapman (1938) New Text: "The two strains can successfully mate but unidirectional reproductive incompatibility between strains has been observed under laboratory conditions (Zhang and Pfeiffer, 2008). DNA analysis of <i>C. nenuphar</i> in the eastern United States of America supports the concept of genetic separation in the species between the northern and southern populations (Zhang et al. 2008). However, the voltinism of several populations included in the Zhang et al. (2008) study was not known, precluding a comprehensive analysis of the genetic separation between strains. The <i>C. nenuphar</i> populations distinguished by the genetic data were not the same as the strain distributions reported in Chapman (1938)"
24	45	There are two phenological strains of <i>C. nenuphar</i> in its native range: a northern strain and a southern strain. The number of generations per year is a defining characteristic of the strains. The northern strain of <i>C. nenuphar</i> must diapause to become reproductively mature (obligate diapause) and has a single generation per year, with adults entering diapause in the late summer and early autumn before female reproductive features have developed. The <i>C. nenuphar</i> southern strain usually has only one generation per year but can develop reproductively and have a second, or even in rare cases, a third generation in a single season (facultative diapause) (Smith and Salkeld, 1964). For this	European Union Phenological strain or Biotype? Would be useful to know the geographical ranges of the two strains. Category: TECHNICAL	Considered, but not incorporated Literature consistently refers to populations as phenological strains. Native ranges can overlap but strains are believed to be separated in Virginia (northern strain to north and southern strain to south). But this division is not absolute because of movement of these strains as explained in Zhang et al. (2008) Ann Entomol Soc. Am. 101: 824-832.

#	Para	Text	Comment	SC's response
		reason, summer- and autumn-harvested fruit may have		
		viable larvae in them in the southeastern United States of		
		America, although this is rare.		
25	45	There are two phenological strains of <i>C. nenuphar</i> in its native range: a northern strain and a southern strain. The number of generations per year is a defining characteristic of the strains. The northern strain of <i>C. nenuphar</i> must diapause to become reproductively mature (obligate diapause) and has a single generation per year, with adults entering diapause in the late summer and early autumn before female reproductive features have developed. The <i>C. nenuphar</i> southern strain usually has only one generation per year but can develop reproductively and have a second, or even in rare cases, a third generation in a single season (facultative diapause) (Smith and Salkeld, 1964). For this reason, summer- and autumn-harvested fruit may have viable larvae in them in the southeastern United States of America, although this is rare.	EPPO Phenological strain or Biotype? Would be useful to know the geographical ranges of the two strains Category: TECHNICAL	Considered, but not incorporated Literature consistently refers to populations as phenological strains. Native ranges can overlap but strains are believed to be separated in Virginia (northern strain to north and southern strain to south). But this division is not absolute because of movement of these strains as explained in Zhang et al. (2008) Ann Entomol Soc. Am. 101: 824-832.
26	47	Name: Conotrachelus nenuphar (Herbst) (1797)(Herbst, 1797)	United States of America Category: EDITORIAL	Incorporated.
27	47	Name:-Conotrachelus nenuphar (Herbst, 1797)Conotrachelus nenuphar (Herbst) (1797)	Australia Taxonomic authority names and year of publication corrected to follow convention. This forms part of the taxonomic name and, as such, is more like an indirect reference to a publication and should not be written the same way a literature citation would be. The exceptions are (Say 1831) and LeConte & Horn 1876) are they are the references for the transfer of those species to different genera and , unlike botany, do not form part of the taxonomic name Category: EDITORIAL	Incorporated.
28	47	Name: Conotrachelus nenuphar (Herbst) (1797)(Herbst, 1797)	China General style for insect scientific name writing. Category: EDITORIAL	Incorporated.
29	49	Curculio nenuphar Herbst (1797)-1797	United States of America Category: EDITORIAL	Incorporated.

#	Para	Text	Comment	SC's response
30	49	Curculio nenuphar Herbst (1797) Curculio nenuphar Herbst, 1797	Australia Taxonomic authority names and year of publication corrected to follow convention. This forms part of the taxonomic name and, as such, is more like an indirect reference to a publication and should not be written the same way a literature citation would be. The exceptions are (Say 1831) and LeConte & Horn 1876) are they are the references for the transfer of those species to different genera and , unlike botany, do not form part of the taxonomic name Category: EDITORIAL	Incorporated.
31	49	Curculio nenuphar Herbst (1797) <u>Herbst, 1797</u>	China General style for insect scientific name writing. Category: EDITORIAL	Incorporated.
32	50	Rhynchaenus argula Fabricius (1801) <u>Fabricius, 1801</u>	United States of America Category : EDITORIAL	Incorporated
33	50	Rhynchaenus argula Fabricius (1801)Rhynchaenus argula Fabricius, 1801	Australia Taxonomic authority names and year of publication corrected to follow convention. This forms part of the taxonomic name and, as such, is more like an indirect reference to a publication and should not be written the same way a literature citation would be. The exceptions are (Say 1831) and LeConte & Horn 1876) are they are the references for the transfer of those species to different genera and , unlike botany, do not form part of the taxonomic name Category: EDITORIAL	Incorporated
34	50	Rhynchaenus argula Fabricius (1801) <u>Fabricius, 1801</u>	China General style for insect scientific name writing. Category: EDITORIAL	Incorporated
35	51	Rhynchaenus cerasi Peck (1819) <u>Peck, 1819</u>	United States of America Category : EDITORIAL	Incorporated
36	51	Rhynchaenus cerasi Peck (1819) Rhynchaenus cerasi Peck, 1819	Australia Taxonomic authority names and year of publication corrected to follow convention. This forms part of the taxonomic name and, as such, is more like an indirect reference to a publication and should not be written the same way a literature citation would be. The exceptions are (Say 1831) and LeConte & Horn 1876) are they are the references for the transfer of those species to different genera and , unlike botany, do not form part of the taxonomic name Category: EDITORIAL	Incorporated
37	51	Rhynchaenus cerasi Peck (1819) Peck, 1819	China General style for insect scientific name writing.	Incorporated

#	Para	Text	Comment	SC's response
			Category : EDITORIAL	
38	52	Cryptorhynchus argula (Fab.)). Say (1831)	United States of America Category : EDITORIAL	Modified. This name is the result of transfer of synonym into a new genus. The name is a taxonomic history but the IPPC guide is to include the most common synonyms. This name does not fulfil the requirement. It has been deleted.
39	52	Cryptorhynchus argula (Fab.) Say (1831)	United States of America For paragraphs 52 and 53, these are not necessarily synonyms but taxonomic history. For example, it appears that it was Say who transferred R. argula to Cryptorhynchus in 1813 and LeConte and Horn who transferred nenuphar from Curculio to Conotrachelus in 1876. Usually, when providing this taxonomic history the page number is also provided, but may not be necessary in this case. Category: TECHNICAL	Modified. This name is the result of transfer of synonym into a new genus. The name is a taxonomic history but the IPPC guide is to include the most common synonyms. This name does not fulfil the requirement. It has been deleted.
40	52	Cryptorhynchus argula (Fab.) Say (1831) Cryptorhynchus argula (Fabricius) (Say 1831)	Australia Taxonomic authority names and year of publication corrected to follow convention. This forms part of the taxonomic name and, as such, is more like an indirect reference to a publication and should not be written the same way a literature citation would be. The exceptions are (Say 1831) and LeConte & Horn 1876) are they are the references for the transfer of those species to different genera and , unlike botany, do not form part of the taxonomic name Category: EDITORIAL	Modified. This name is the result of transfer of synonym into a new genus. The name is a taxonomic history but the IPPC guide is to include the most common synonyms. This name does not fulfil the requirement. It has been deleted.
41	52	Cryptorhynchus argula (Fab.) Say (1831) Cryptorhynchus argula (Fabricius, 1831) or Cryptorhynchus argula (Fabricius) Say, 1831 or Cryptorhynchus argula (Fab.) Say, 1831	China General style for insect scientific name writing. It is better to use the first among three names. Category: EDITORIAL	Modified. This name is the result of transfer of synonym into a new genus. The name is a taxonomic history but the IPPC guide is to include the most common synonyms. This name does not fulfil the requirement. It has been deleted.
42	53	Conotrachelus nenuphar (Hbst.) (Herbst), LeConte and Horn (1876)	United States of America Category : EDITORIAL	Modified. This name is the result of transfer of synonym into a new genus. The name is a taxonomic history but the IPPC guide is to include the most common synonyms. This name

#	Para	Text	Comment	SC's response
				does not fulfil the requirement. It has been deleted.
43	53	Conotrachelus nenuphar (Hbst.) LeConte Conotrachelus nenuphar (Herbst) (LeConte and Horn (1876) Horn(1876)	Australia Taxonomic authority names and year of publication corrected to follow convention. This forms part of the taxonomic name and, as such, is more like an indirect reference to a publication and should not be written the same way a literature citation would be. The exceptions are (Say 1831) and LeConte & Horn 1876) are they are the references for the transfer of those species to different genera and , unlike botany, do not form part of the taxonomic name Category: EDITORIAL	Modified. This name is the result of transfer of synonym into a new genus. The name is a taxonomic history but the IPPC guide is to include the most common synonyms. This name does not fulfil the requirement. It has been deleted.
44	53	Conotrachelus nenuphar (Hbst.) LeConte and Horn (1876) Conotrachelus nenuphar (Herbst, 1797) or Conotrachelus nenuphar (Herbst) LeConte & Horn, 1876 or Conotrachelus nenuphar (Hbst.) LeConte & Horn, 1876	China General style for insect scientific name writing. It is better to use the first among three names. Category: EDITORIAL	Modified. This name is the result of transfer of synonym into a new genus. The name is a taxonomic history but the IPPC guide is to include the most common synonyms. This name does not fulfil the requirement. It has been deleted.
45	56	Common name: Plum curculio, plum weevil, American plum weevil, peach curculio	China Adding other three common names for this species. Category: TECHNICAL	According to IPPC guide to authors: "The English common names widely used in international scientific literature should also be included." The official common name for use in USA is plum curculio (ESA website). The other English common name referred to is the Plum weevil (EPPO fact sheet). This name is added.
46	56	Common name: Plum curculio, Plum Weevil	Philippines Category: SUBSTANTIVE	Incorporated.
47	60	eggs – found within immature fruit tissue and mature fruit tissue (if from the southern strain)strain) (Adding a clear picture of the egg.)	China The egg picture is also useful to know this species. Category: SUBSTANTIVE	Considered, but not incorporated Images and illustrations of eggs are not readily available. The opinion of experts is that inclusion of egg

#	Para	Text	Comment	SC's response
				images would not enhance the quality of the protocol. Appearance of this life stage cannot be used to identify the pest.
48	60	eggs – found within immature fruit tissue and mature fruit tissue (if from the southern strain)	PPPO Maybe expound on this southern strain. How many strains are there. Category: EDITORIAL	Considered, but not incorporated This is better explained in Pest Information section. That section now includes additional text and references.
49	61	larvae – found within immature fruit tissue and mature fruit tissue (Figure 1)1)(Adding a clear picture of the larva.)	China The picture of larva in fruit is good enough to identify the larva. Category: SUBSTANTIVE	Considered, but not incorporated The opinion of experts is that inclusion of larvae images would not enhance the quality of the protocol. Appearance of this life stage cannot be used to identify the pest.
50	62	pupae – found in the soilsoil (Adding a clear picture of the pupa.)	China The pupa picture is also useful to know this species. Category: SUBSTANTIVE	Considered, but not incorporated The opinion of experts is that inclusion of pupae images would not enhance the quality of the protocol. Appearance of this life stage cannot be used to identify the pest.
51	66	In immature fruit, a small crescent-shaped cut and scar are indicative of oviposition (Figure 2). To lay an egg, a female must puncture the skin of the developing fruit with her mandibles-mouthparts and excavate a small, shallow cavity. A single egg is deposited in the centre of this cavity, after which the female cuts a crescent-shaped slit which extends beneath the egg cavity. A single female may lay multiple eggs on a single fruit. Adults also feed on fruits. Adult feeding punctures on immature fruits are circular (not crescent shaped) and extend up to 3 mm into the fruit.	China When puncture the skin of the fruit and excavate the cavity, the females not only use her mandibles, but also the maxillaries. Category: EDITORIAL	Incorporated.

#	Para	Text	Comment	SC's response
52	67	In mature fruit, the oviposition scar becomes more diffuse and takes on a corky appearance. These can look like mottled fans with a small scar at the base of the fan (Figure 3). Adult feeding punctures on mature fruits also appear circular and tend to cluster around the calyx of the fruit. On apple, Conotrachelus nenuphar can cause two types of damage. In spring, females oviposit in young fruit, marking them with characteristic half-moon shaped scars; and in spring and summer, the adults puncture the fruit causing round (2-3 mm diameter), feeding scars.	Viet Nam Vietnam would like to add more symptoms follow reference: http://www.cabi.org/isc/datasheet/15164 (CABI, 2017) Category: EDITORIAL	Considered, but not incorporated This information is already included in previous sentences
53	74	Larval and pupal life stages are particularly at risk of being misidentified, because of the lack of reliable identification diagnostics or keys for them. Molecular methods of diagnosis for this species are still in development (Crane, 2011) and are not included in this protocol.	United States of America For consideration, some countries may use a designated authority to identify immatures, but may not use published references or keys. Category: TECHNICAL	Considered, but not incorporated Noted but the DP should have only documented methods that allow reliable identification by community of experts.
54	74	Larval and pupal life stages are particularly at risk of being misidentified, because of the lack of reliable identification diagnostics or keys for them. Molecular methods of diagnosis for this species are still in development (Crane, 2011) and are not included in this protocol. (Molecular methods of diagnosis for this species are still in development (Crane, 2011) and are not specifically included in this protocol. Add "But for the quick molecular identification, the readers may refer to Lin et al. (2008).)	China For the molecular methods of diagnosis for this species, Lin et al. (2008) has published a paper and they have designed a species specific primer for this species with COI gene. Category: TECHNICAL	Modified. The Lin et al 2008 study developed a test but did not demonstrate its specificity for <i>C. nenuphar</i> using related weevils. This test might not be appropriate for reliable identification of the pest. Lin et al. is now cited in para 74.
55	77	The typical size for adult <i>C. nenuphar</i> specimens is between 4 mm and 6 mm body length, allowing for pin mounting directly through the right elytron. There are several important diagnostic characters on the legs, so spreading the legs while mounting is recommended to facilitate identification.	United States of America Last sentence: Or moving the legs to the side and down. Category: TECHNICAL	Incorporated.
56	77	The <u>adult is 0.7 cm long with a typical rostrum. The typical</u> size for adult <i>C. nenuphar</i> specimens is between 4 mm and 6 mm body length, allowing for pin mounting directly through the right elytron. There are several important diagnostic characters on the legs, so spreading the legs while mounting is recommended to facilitate identification.	Viet Nam Vietnam would like to add more natural size and type body of this insect (https://www.eppo.int/QUARANTINE/data_sheets/insects/CONHNE_ds.pdf: CABI and EPPO for the EU under Contract 90/399003, EPPO quarantine pest: Data Sheets on Quarantine Pests: Conotrachelus nenuphar) Category: EDITORIAL	Considered, but not incorporated The point of the sentence is to give an indication of size range of the insect in relation to the magnification needed to examine it. The recommended change would

#	Para	Text	Comment	SC's response
				not improve the text and could confuse the intended point.
57	79	The weevil family, Curculionidae, is very large, with more than 50 000 described species (Oberprieler <i>et al.</i> , 2007). Keys to identify this family are available in general entomology references and not provided in the current protocol. The best external morphological characters for the recognition of the weevils are associated with their rostrum (snout or beak) (Figure 5), although some weevils have a very short rostrum and some have no rostrum at all (especially in the Scolytinae and Platypodinae). The length of the rostrum, its curvature, or lack of curvature, the degree of punctation or sculpturing, and the type and density of vestiture are all used in classification. Another set of diagnostic characters are those of the antennae (Figure 5). The first article (the scape) is elongate and inserted away from the base, usually near the middle and at times near the apex. It can be directed in many ways (e.g. dorsally, ventrally), has various lengths and shapes, and often rests in a lateral groove (scrobe). The number of funicular articles varies from four to eight articles, and the last three antennal articles normally form a compact club (Figure 5).	United States of America Arnett, JR, Michael C. Thomas, Paul E. Skelley, J. Howard Frank"). Category: TECHNICAL	Modified. It appears that the comment is a request to include American Beetles Vol 2: Polyphaga: Scaravaedoidea through Curculionidea (eds. Arnett et al. 2002) as general reference. Anderson (2002) from that book is now cited here at the same location as the Oberprieler et al., 2007 citation.
58	79	The weevil family, Curculionidae, is very large, with more than 50 000 described species (Oberprieler <i>et al.</i> , 2007). Keys to identify this family are available in general entomology references and not provided in the current protocol protocol (note: other fundamental characters are used to define the Cuculionidae e.g. the 5-5-5 tarsal formula). The best external morphological characters for the recognition of the weevils are associated with their rostrum (snout or beak) (Figure 5), although some weevils have a very short or truncate rostrum as seen in the subfamily Enteminae and some have no rostrum at all (especially in the Scolytinae and Platypodinae). The length of the rostrum, its curvature, or lack of curvature, the degree of punctation or sculpturing, and the type and density of vestiture are all used in	European Union Other fundamental characters are used to define the Cuculionidae e.g. the 5-5-5 tarsal formula). Category: TECHNICAL	Modified. The addition of example for truncate rostrum has been added: "although some weevils have a very short or truncate rostrum (as seen in the subfamily Enteminae) and some have no rostrum at all (especially in the Scolytinae and Platypodinae)." The 5-5-5 tarsal formula is not included as a character because of variations of the form within the family that appear to deviate from 5-5-5. In the Genus Conotrachelus the

#	Para	Text	Comment	SC's response
		classification. Another set of diagnostic characters are those of the antennae (Figure 5). The first article (the scape) is elongate and inserted away from the base, usually near the middle and at times near the apex. It can be directed in many ways (e.g. dorsally, ventrally), has various lengths and shapes, and often rests in a lateral groove (scrobe). The number of funicular articles varies from four to eight articles, and the last three antennal articles normally form a compact club (Figure 5).		weevils have a morphology that appears 4-4-4. New text is included in Table 1 (after para 98): "Tarsal formula a modified 5-5-5, with the third tarsomere broadly bilobed and fourth tarsomere small and partly hidden in base of third tarsomere, formula often appearing to be 4-4-4."
59	79	The weevil family, Curculionidae, is very large, with more than 50 000 described species (Oberprieler <i>et al.</i> , 2007). Keys to identify this family are available in general entomology references and not provided in the current protocol. The best external morphological characters for the recognition of the weevils are associated with their rostrum (snout or beak) (Figure 5), although some weevils have a very short rostrum and some have no rostrum at all (especially in the Scolytinae and Platypodinae). The length of the rostrum, its curvature, or lack of curvature, the degree of punctation or sculpturing, and the type and density of vestiture are all used in classification. Another set of diagnostic characters are those of the antennae (Figure 5). The first article (the scape) is elongate and inserted away from the base, usually near the middle and at times near the apex. It can be directed in many ways (e.g. dorsally, ventrally), has various lengths and shapes, and often rests in a lateral groove (scrobe). The number of funicular articles varies from four to eight articles, and the last three antennal articles normally form a compact club (Figure 5).	EPPO Other fundamental characters are used to define the Cuculionidae e.g. the 5-5-5 tarsal formula) Category: TECHNICAL	Modified. The addition of example for truncate rostrum has been added: "although some weevils have a very short or truncate rostrum (as seen in the subfamily Enteminae) and some have no rostrum at all (especially in the Scolytinae and Platypodinae)." The 5-5-5 tarsal formula is not included as a character because of variations of the form within the family that appear to deviate from 5-5-5. In the Genus Conotrachelus the weevils have a morphology that appears 4-4-4. New text is included in Table 1 (after para 98): "Tarsal formula a modified 5-5-5, with the third tarsomere broadly bilobed and fourth tarsomere small and partly hidden in base of third tarsomere, formula often appearing to be 4-4-4."
60	79	The weevil family, Curculionidae, is very large, with more than 50 000 described species (Oberprieler <i>et al.</i> , 2007). Keys to identify this family <u>and</u> are available in general entomology references and not provided in the current <u>protocol</u> protocol (note: Other fundamental characters are <u>used to define the Cuculionidae e.g.</u> the 5-5-5 tarsal formula).	EPPO Other fundamental characters are used to define the Cuculionidae e.g. the 5-5-5 tarsal formula) Category: TECHNICAL	Modified. The addition of example for truncate rostrum has been added: "although some weevils have a very short or truncate rostrum (as seen in the subfamily Enteminae) and some have no

#	Para	Text	Comment	SC's response
61	80	The best external morphological characters for the recognition of the weevils are associated with their rostrum (snout or beak) (Figure 5), although some weevils have a very short or truncate rostrum as seen in the subfamily Enteminae and some have no rostrum at all (especially in the Scolytinae and Platypodinae). The length of the rostrum, its curvature, or lack of curvature, the degree of punctation or sculpturing, and the type and density of vestiture are all used in classification. Another set of diagnostic characters are those of the antennae (Figure 5). The first article (the scape) is elongate and inserted away from the base, usually near the middle and at times near the apex. It can be directed in many ways (e.g. dorsally, ventrally), has various lengths and shapes, and often rests in a lateral groove (scrobe). The number of funicular articles varies from four to eight articles, and the last three antennal articles normally form a compact club (Figure 5). 4.3 Morphological identification of adults of the genus Conotrachelus	United States of America Perhaps useful in this section is a discussion of genera that may be misidentified as Conotrachelus. The first one that	rostrum at all (especially in the Scolytinae and Platypodinae)." The 5-5-5 tarsal formula is not included as a character because of variations of the form within the family that appear to deviate from 5-5-5. In the Genus Conotrachelus the weevils have a morphology that appears 4-4-4. New text is included in Table 1 (after para 98): "Tarsal formula a modified 5-5-5, with the third tarsomere broadly bilobed and fourth tarsomere small and partly hidden in base of third tarsomere, formula often appearing to be 4-4-4." Considered, but not incorporated.
			comes to mind is Pheloconus. Category: TECHNICAL	There are no genera in the Conotrachelini that should be confused or misidentified with <i>C. nenuphar</i> and its close relatives when compared with the tables of diagnostic characters and the illustrations in the protocol. <i>Pheloconus</i> was included in the <i>Conotrachelus</i> originally as a species group and subsequently as a subgenus and now a genus, but it does not fit the complex of diagnostic characters of <i>C. nenuphar</i> .
62	81	Conotrachelus Dejean 1835 is a New World beetle genus with approximately 1 200 named species (O'Brien and Wibmer, 1982; Wibmer and O'Brien, 1986). The highest species diversity is concentrated in South America, where there are many endemic species. The Conotrachelus diversity found in the United States of America and Canada (where	United States of America Third sentence: new species awaiting description. Category: SUBSTANTIVE	Considered, but not incorporated This is a true statement but applicable to nearly all insect groups. Inclusion does not add value to identification.

#	Para	Text	Comment	SC's response
		Conotrachelus nenuphar is endemic) is limited to approximately 63 of 1 200 described species, with possibly new species awaiting description. Identification of the genus Conotrachelus is possible using the adult characters provided in Table 1.		
63	81	Conotrachelus Dejean 1835 is a New World beetle genus with approximately 1 200 named species (O'Brien and Wibmer, 1982; Wibmer and O'Brien, 1986). The highest species diversity is concentrated in South America, where there are many endemic species. The Conotrachelus diversity found in the United States of America and Canada (where Conotrachelus nenuphar is endemic) is limited to approximately 63 of 1 200 described species. Identification of the genus Conotrachelus is possible using the adult characters provided in Table 1. (Adding the brief introduction to systematic status of Molytinae, Conotrachelini, including how many tribes in the subfamily, as well as how many genera in the tribe.)	China It will help the understanding of this group. Category: TECHNICAL	Considered, but not incorporated The subfamily Molytinae is large and very diverse. None of the other tribes is likely to be misidentified with Conotrachelini and the diagnostic characters are sufficient to distinguish <i>C. nenuphar</i> and its close relatives. There are no keys to the tribes or genera available and such keys go beyond the scope of this work. Text on systematics of insect groups is not usually included in diagnostic protocols unless information is important for completing an identification. This is not true for Molytinae.
64	82	Table 1. Diagnostic characters of the genus (Adding a key to 22 genera in Conotrachelini.)	China It will be helpful to identify the weevil specimens to the genus level. Category: SUBSTANTIVE	Considered, but not incorporated The purpose of the DP is to identify the species <i>C. nenuphar</i> . Identification of the many genera of the tribe or subfamily is not required to perform this species identification accurately. The necessary characters are provided in Table 1 to determine if the specimen is of the genus <i>Conotrachelus</i> or not. The only key available is to the USA and Canada, Anderson, 2002. The diagnostic characters to distinguish the genus and species are aided by the illustrations. That reference is now cited in the text of para 82: "For additional information, a key to

#	Para	Text	Comment	SC's response
				North American genera in the tribe Conotrachelini including Conotrachelus is available (Anderson, 2002)."
65	96	Procoxa Procoxae contiguous or approximate	United States of America "Procoxa contiguous" should be "Procoxae contiguous" because contiguous refers to two items nearly touching. Category: TECHNICAL	Incorporated.
66	99	4.4 Morphological identification of adult Conotrachelus nenuphar (Adding some other related species of importance, such as C. albicinctus, C. retentus, C. falli, C. affinis, C. seniculus, C. elegans, C. aratus, and make a key to those species.)	China Conotrachelus spp. may be introduced not only by fruit trade but contamination to the container also. In 2011, one weevil was found in a container from Brazil and was identified as Conotrachelus perseae. It will be better to add some other related species of importance and make a key for the identification of them. Category: SUBSTANTIVE	Considered, but not incorporated Although more inclusive methods are helpful when the specimen is not <i>C. nenuphar</i> the scope of the protocol was specified for <i>C. nenuphar</i> . The protocol provides a method to accomplish accurate identification of a weevil as this species. It is not feasible to change the scope of the protocol.
67	100	Of the <u>64</u> Conotrachelus species found in the United States of America and Canada, 46 species are broadly sympatric with <i>C. nenuphar</i> , being found in the eastern portion of North America, here defined as north of the United Mexican States and east of the Rocky Mountains. Of those Conotrachelus species found in the same geographical regions as <i>C. nenuphar</i> , only three are known to use commercial fruit trees as hosts (Schoof, 1942). Two of these are <i>C. anaglypticus</i> (Say) and <i>C. carolinensis</i> Schoof, which are closely related, and the third is <i>C. crataegi</i> Walsh.	European Union Category: EDITORIAL	Considered, but not incorporated The number of species is already mentioned in section 4.3
68	100	Of the <u>64 Conotrachelus</u> species found in the United States of America and Canada, 46 species are broadly sympatric with <i>C. nenuphar</i> , being found in the eastern portion of North America, here defined as north of the United Mexican States and east of the Rocky Mountains. Of those <i>Conotrachelus</i> species found in the same geographical regions as <i>C. nenuphar</i> , only three are known to use commercial fruit trees as hosts (Schoof, 1942). Two of these are <i>C. anaglypticus</i> (Say) and <i>C. carolinensis</i> Schoof, which are closely related, and the third is <i>C. crataegi</i> Walsh.	EPPO Category : EDITORIAL	Considered, but not incorporated The number of species is already mentioned in section 4.3

#	Para	Text	Comment	SC's response
69	101	Critically important in the identification of many <i>Conotrachelus</i> species is the postmedian elytral band (Figure 7(A)). This is a region just behind the middle of the elytra, and there are diagnostic differences between species. Among species related to <i>C. nenuphar</i> , the most important diagnostic characters are the presence or absence of carinate elytral intervals and elytral crests, and the type of vestiture and its pattern. The minimum requirements to reliably identify <i>C. nenuphar</i> and separate it from <i>C. anaglypticus</i> , <i>C. carolinensis</i> Schoof and <i>C. crataegi</i> are contained in Table 2. For reliable identification, a <i>C. nenuphar</i> adult specimen must have all the characteristics described; the identification is strengthened further if the specimen has been collected from one of the known host fruits of the species.	European Union Authority already given at the end of paragraph 100. Category: EDITORIAL	Incorporated.
70	101	Critically important in the identification of many <i>Conotrachelus</i> species is the postmedian elytral band (Figure 7(A)). This is a region just behind the middle of the elytra, and there are diagnostic differences between species. Among species related to <i>C. nenuphar</i> , the most important diagnostic characters are the presence or absence of carinate elytral intervals and elytral crests, and the type of vestiture and its pattern. The minimum requirements to reliably identify <i>C. nenuphar</i> and separate it from <i>C. anaglypticus</i> , <i>C. earolinensis carolinensis</i> Schoof and <i>C. crataegi</i> are contained in Table 2. For reliable identification, a <i>C. nenuphar</i> adult specimen must have all the characteristics described; the identification is strengthened further if the specimen has been collected from one of the known host fruits of the species.	EPPO Authority already given at the end of paragraph 100. Category: EDITORIAL	Incorporated.
71	102	Four species related to <i>C. nenuphar</i> and from the same region from North America are also discussed and illustrated in the protocol, although they are not associated with stone fruits (Table 3). These are <i>C. juglandis</i> Leconte associated with species of <i>Juglans</i> , <i>C. corni</i> Brown on <i>Cornus stolonifera</i> Micjhx., <i>C. buchanani</i> Schoof on <i>Celtis</i>	United States of America Point 3 - Additionally, it is important to consider sexually dimorphic differences within the species - male C. nenuphar have large dentate metaunci (uncus of the hind leg). Finally, while cumbersome to dissect, the aedeagus will eliminate doubts as to the identity of C. nenuphar. As Schoof indicates in the key, C. nenuphar aedeagus has a distinct apical process. He provides an illustration which could be included here as well for completeness.	A new sentence has been added to para 101 about sexual dimorphism: "In addition, it is important to consider sexually dimorphic differences within the species: male <i>C. nenuphar</i> have broad dentate metaunci (uncus of

#	Para	Text	Comment	SC's response
		occidentalis and C. iowensis Schoof, which to date has no known host.	Category: TECHNICAL	the hind leg), whereas females have narrow, non-dentate metaunci." The male genitalia of specimen are not included in the protocol because identification can be confirmed without observing genitalia if other characters are present. Para 76 includes statement on this character. Given the large number of weevil species lacking description of genitalia and the expertise required for dissection its inclusion was not necessary.
72	102	Four species related to <i>C. nenuphar</i> and from the same region from North America are also discussed and illustrated in the protocol, although they are not associated with stone fruits (Table 3). These are <i>C. juglandis</i> Leconte associated with species of <i>Juglans</i> , <i>C. corni</i> Brown on <i>Cornus stolonifera</i> Micjhx., <i>C. buchanani</i> Schoof on <i>Celtis occidentalis</i> occidentalis, and <i>C. iowensis</i> Schoof, which to date has no known host.	European Union Clearer ? Category : EDITORIAL	Incorporated
73	102	Four species related to <i>C. nenuphar</i> and from the same region from North America are also discussed and illustrated in the protocol, although they are not associated with stone fruits (Table 3). These are <i>C. juglandis</i> Leconte associated with species of <i>Juglans</i> , <i>C. corni</i> Brown on <i>Cornus stolonifera</i> Micjhx., <i>C. buchanani</i> Schoof on <i>Celtis occidentalis occidentalis</i> , and <i>C. iowensis</i> Schoof-5, which to date has no known host.	EPPO Clearer? Category: EDITORIAL	Incorporated
74	102	Four species related to <i>C. nenuphar</i> and from the same region from North America are also discussed and illustrated in the protocol, although they are not associated with stone fruits (Table 3). These are <i>C. juglandis</i> Leconte associated with species of <i>Juglans</i> , <i>C. corni</i> Brown on <i>Cornus stolonifera</i> MiejhxMichx., <i>C. buchanani</i> Schoof on <i>Celtis occidentalis</i> and <i>C. iowensis</i> Schoof, which to date has no known host.	Australia Misspelling of name Category: EDITORIAL	Incorporated.

#	Para	Text	Comment	SC's response
75	109	C. nenuphar-(Figures 8-10) (Figures 8-10)	European Union No bold, no italics (please see Table 3, paragraphs 154 to 157). Category: EDITORIAL	Incorporated.
76	109	C. nenuphar (Figures 8–10) (Figures 8–10)	EPPO No bold, no italics (please see Table 3, paragraphs 154 to 157). Category: EDITORIAL	Incorporated.
77	110	C. anaglypticus (Figure 11)(Figure 11)	European Union No bold (please see Table 3, paragraphs 154 to 157). Category: EDITORIAL	Incorporated.
78	110	C. anaglypticus (Figure 11)(Figure 11)	EPPO No bold (please see Table 3, paragraphs 154 to 157). Category: EDITORIAL	Incorporated.
79	111	C. carolinensis (Figure 12)(Figure 12)	European Union No bold (please see Table 3, paragraphs 154 to 157). Category: EDITORIAL	Incorporated.
80	111	C. carolinensis (Figure 12)(Figure 12)	EPPO No bold (please see Table 3, paragraphs 154 to 157). Category: EDITORIAL	Incorporated.
81	112	C. crataegi (Figure 13)(Figure 13)	European Union No bold (please see Table 3, paragraphs 154 to 157). Category: EDITORIAL	Incorporated.
82	112	C. crataegi (Figure 13)(Figure 13)	EPPO No bold (please see Table 3, paragraphs 154 to 157). Category: EDITORIAL	Incorporated.
83	120	Scutellum prominent on all margins and not sloping, sloping (Figure 11(A)).	European Union Typo. Category: EDITORIAL	Incorporated.
84	120	Scutellum prominent on all margins and not sloping, sloping (Figure 11(A)).	EPPO Typo. Category: EDITORIAL	Incorporated.
85	121	Scutellum prominent on all margins and not sloping, sloping (Figure 12 (A)).	European Union Typo. Category: EDITORIAL	Incorporated.
86	121	Scutellum prominent on all margins and not sloping, sloping (Figure 12 (A)).	EPPO Typo. Category: EDITORIAL	Incorporated.
87	126	Postmedian band distinctly reddish brown to reddish yellow, vestiture with distinct lines of white recumbent setae-setae, small areas of the elytra are intensely black with humps (Figure 9(A) and (B)).	Viet Nam Vietnam would like to add more diagnostic characters of C. nenuphar (https://www.eppo.int/QUARANTINE/data_sheets/insects/C ONHNE_ds.pdf). Category: TECHNICAL	Considered, but not incorporated. These characters (costae and black areas) are already mentioned (para 125).

#	Para	Text	Comment	SC's response
88	140	Femora with two teeth, proximal tooth larger (Figure 7(B)). Metaunci of male broad and dentate, in female narrow and non-dentate (Figure (10)). Tarsal claws divergent, not close together, with prominent teeth. Femora with two teeth, proximal tooth larger-larger, rarely	Viet Nam Vietnam would like to add more diagnostic characters of C. nenuphar (https://www.eppo.int/QUARANTINE/data_sheets/insects/C ONHNE_ds.pdf). Category: TECHNICAL Viet Nam	Considered, but not incorporated. The characters provided are accurate. Considered, but not
03	140	one absent (Figure 7(B)). Metaunci of male broad and dentate, in female narrow and non-dentate (Figure (10)). Tarsal claws divergent, not close together, with prominent teeth.	Category : TECHNICAL	incorporated. This change is not correct. This character is not absent in this species.
90	147	Cambium and inner bark of peaches (<i>Prunus persica</i>), apple (<i>Malus</i> sppand various other fruit and shade trees including pear (<i>Pyrus</i> spp.), pignut (<i>Conopodium majus</i>), American hornbeam (<i>Carpinus caroliana</i>), sweet birch (<i>Betula lenta</i>), American Beech (<i>Fagus grandifolia</i>), American chestnut (<i>Castanea dentata</i>), white oak (<i>Quercus alba</i>), chestnut oak (<i>Quercus prinus</i>), red oak (<i>Quercus rubra</i>), tulip tree (<i>Liriodendron</i> spp.), serviceberry (<i>Amelanchier</i> spp.), red maple (<i>Acer rubrum</i>), tupelo (<i>Nyssa sylvatica</i>), flowering dogwood (<i>Cornus florida</i>), sourwood (<i>Oxydendrum</i> spp.) and breed in stems of columbine (<i>Aquilegia</i> spp.).	European Union Put the Latin names first and the common names in second in brackets. Category: EDITORIAL	Incorporated.
91	147	Cambium and inner bark of peaches (<i>Prunus persica</i>), apple (<i>Malus</i> sppand various other fruit and shade trees including pear (<i>Pyrus</i> spp.), pignut (<i>Conopodium majus</i>), American hornbeam (<i>Carpinus caroliana</i>), sweet birch (<i>Betula lenta</i>), American Beech (<i>Fagus grandifolia</i>), American chestnut (<i>Castanea dentata</i>), white oak (<i>Quercus alba</i>), chestnut oak (<i>Quercus prinus</i>), red oak (<i>Quercus rubra</i>), tulip tree (<i>Liriodendron</i> spp.), serviceberry (<i>Amelanchier</i> spp.), red maple (<i>Acer rubrum</i>), tupelo (<i>Nyssa sylvatica</i>), flowering dogwood (<i>Cornus florida</i>), sourwood (<i>Oxydendrum</i> spp.) and breed in stems of columbine (<i>Aquilegia</i> spp.).	EPPO Put the Latin names first and the common names in second in brackets. Category: EDITORIAL	Incorporated.
92	148	Peaches (<i>Prunus persica</i>).	European Union Put the Latin name first and the common name in second in brackets.	Incorporated.

#	Para	Text	Comment	SC's response
			Category : EDITORIAL	
93	148	Peaches (<i>Prunus persica</i>).	Put the Latin name first and the common name in second in brackets. Category: EDITORIAL	Incorporated.
94	149	Hawthorns (Crataegus spp.), peaches (Prunus persica).	European Union Put the Latin names first and the common names in second in brackets. Category: EDITORIAL	Incorporated.
95	149	Hawthorns (<i>Crataegus</i> spp.), peaches (<i>Prunus persica</i>).	Put the Latin names first and the common names in second in brackets. Category: EDITORIAL	Incorporated.
96	155	C. corni (Figure 15)	United States of America Species is superficially very similar to and potentially readily confused with C. nenuphar. See Brown reference attached. Category: TECHNICAL	Additional text was added to para 102: "Of these species, <i>C. corni</i> is the most similar in appearance to <i>C. nenuphar</i> but is much smaller in size, with body length 2.9 – 3.9 mm. The prothorax of <i>C. cornis</i> , at most, has a scarcely evident anterior median carina, and the scutellum is not sloping and is prominent on all sides; compare characters in Table 2 and Table 3 for other differences (Brown, 1966)." The Brown (1966) paper is now included in references.
97	165	Scutellum prominent on all margins and not sloping- (Figure 15(A)).	European Union Typo. Category: EDITORIAL	Incorporated.
98	165	Scutellum prominent on all margins and not sloping- (Figure 15(A)).	EPPO Typo. Category: EDITORIAL	Incorporated
99	167	Scutellum prominent on all margins and not sloping- (Figure 17(A)).	European Union Typo. Category: EDITORIAL	Incorporated
100	167	Scutellum prominent on all margins and not sloping- (Figure 17(A)).	EPPO Typo. Category: EDITORIAL	Incorporated
101	169	Two distinct costae (or crests), one on each elytron on interval 3 (Figure 14B)14(B)). Region between and around	European Union Missing brackets. Category : EDITORIAL	Incorporated.

#	Para	Text	Comment	SC's response
		costae and costae themselves not devoid of vestiture; black		
102	169	with sparse brown and white setae. Two distinct costae (or crests), one on each elytron on interval 3 (Figure 14B)14(B)). Region between and around costae and costae themselves not devoid of vestiture; black with sparse brown and white setae.	EPPO Missing brackets. Category: EDITORIAL	Incorporated.
103	178	Abdominal sterna moderately coarsely and moderately sparsely punctate. Vestiture of sterna fine; white, widely scattered setae Figure 15(B)(Figure 15(B)).	European Union Missing brackets. Category: EDITORIAL	Incorporated.
104	178	Abdominal sterna moderately coarsely and moderately sparsely punctate. Vestiture of sterna fine; white, widely scattered setae (Figure 15(B)).	Japan Editorial Category: EDITORIAL	Incorporated.
105	178	Abdominal sterna moderately coarsely and moderately sparsely punctate. Vestiture of sterna fine; white, widely scattered setae Figure 15(B)(Figure 15(B)).	EPPO Missing brackets. Category : EDITORIAL	Incorporated.
106	191	Collected frequently in <u>oak Quercus (oak)</u> woodlands, but no breeding host is known.	European Union Latin name missing. Category: EDITORIAL	Incorporated.
107	191	Collected frequently in <u>oak-Quercus (oak)</u> woodlands, but no breeding host is known.	EPPO Latin name missing. Category: EDITORIAL	Incorporated.
108	198	In cases where other contracting parties may be affected by the results of the diagnosis, in particular in cases of noncompliance (ISPM-[ISPM 13 (Guidelines for the notification of non-compliance and emergency action)) and where Conotrachelus nenuphar is found in an area for the first time, the following records and evidence and additional material should be kept for at least one year in a manner that ensures traceability: preserved pinned or slide-mounted specimens, and photographs of distinctive taxonomic structures.	Philippines Category: EDITORIAL	Considered but not incorporated. IPPC style guide section 11.1 states that square brackets are not to be used.
109	199	6. Contact Points for Further Information	Viet Nam This section move to Appendix 1 Category : EDITORIAL	Considered, but not incorporated The current format is in line with the IPPC protocol's format.
110	200	Further information on this protocol can be obtained from:	Viet Nam This para move to Appendix 1 Category : EDITORIAL	Considered, but not incorporated The current format is in line with the IPPC protocol's format.

#	Para	Text	Comment	SC's response
111	201	Caribbean Agricultural Health and Food Safety Agency, Suriname (Juliet Goldsmith; email: Juliet.goldsmith@cahfsa.org).	Viet Nam This para move to Appendix 1 Category : EDITORIAL	Considered, but not incorporated The current format is in line with the IPPC protocol's format.
112	202	University of Arizona, Tucson, AZ, United States of America (Charles W. O'Brien; email: cobrien6@cox.net).	Viet Nam This para move to Appendix 1 Category : EDITORIAL	Considered, but not incorporated The current format is in line with the IPPC protocol's format.
113	203	United States Department of Agriculture, Systematic Entomology Laboratory, MRC 168, National Museum of Natural History, Washington, DC 200137012, United States of America (Lourdes Chamorro; email: lourdes.chamorro@ars.usda.gov).	Viet Nam This para move to Appendix 1 Category: EDITORIAL	Considered, but not incorporated The current format is in line with the IPPC protocol's format.
114	204	A request for a revision to a diagnostic protocol may be submitted by national plant protection organizations (NPPOs), regional plant protection organizations (RPPOs) or Commission on Phytosanitary Measures (CPM) subsidiary bodies through the IPPC Secretariat (ippc@fao.org), which will in turn forward it to the Technical Panel on Diagnostic Protocols (TPDP).	Viet Nam This para move to Appendix 1 Category: EDITORIAL	Considered, but not incorporated The current format is in line with the IPPC protocol's format.
115	205	7. Acknowledgements	Viet Nam This section move to Appendix 2 Category : EDITORIAL	Considered, but not incorporated The current format is in line with the IPPC protocol's format.
116	206	This protocol was drafted by Charles W. O'Brien (University of Arizona, United States of America (see preceding section)) and Juliet Goldsmith (Caribbean Agricultural Health and Food Saftey Agency, Suriname (see preceding section)) from a preliminary draft by Samuel Crane (Amplify, New York, United States of America), all with assistance from Norman Barr (Animal and Plant Health Inspection Service, United States Department of Agriculture, United States of America).	Viet Nam This para move to Appendix 2 Category: EDITORIAL	Considered, but not incorporated The current format is in line with the IPPC protocol's format.
117	206	This protocol was drafted by Charles W. O'Brien (University of Arizona, United States of America (see preceding section)) and Juliet Goldsmith (Caribbean Agricultural Health and Food Saftey Safety Agency, Suriname (see preceding section)) from a preliminary draft by Samuel Crane (Amplify, New York, United States of America), all	United States of America Category: EDITORIAL	Incorporated.

#	Para	Text	Comment	SC's response
		with assistance from Norman Barr (Animal and Plant Health Inspection Service, United States Department of Agriculture, United States of America).		
118	207	In addition, the following experts were significantly involved in the development of this protocol: N. Franz (Arizona State University, United States of America), H. Shirato (Yokohama Plant Protection Station, Ministry of Agriculture, Forestry and Fisheries, Japan), and R. Mouttet (France).	Viet Nam This para move to Appendix 2 Category: EDITORIAL	Considered, but not incorporated The current format is in line with the IPPC protocol's format.
119	207	In addition, the following experts were significantly involved in the development of this protocol: NNico Franz (Arizona State University, United States of America), HHiroaki Shirato (Yokohama Plant Protection Station, Ministry of Agriculture, Forestry and Fisheries, Japan), and RRaphaëlle Mouttet (France).	European Union For consistency with the previous paragraph. Category: EDITORIAL	Incorporated.
120	207	In addition, the following experts were significantly involved in the development of this protocol: NNico Franz (Arizona State University, United States of America), HHiroaki Shirato (Yokohama Plant Protection Station, Ministry of Agriculture, Forestry and Fisheries, Japan), and RRaphaëlle Mouttet (France).	EPPO For consistency with the previous paragraph. Category: EDITORIAL	Incorporated.
121	210	Anderson, R.S. 2002. Family 131. Curculionidae Latreille 1802. In: R.H. Arnett, Jr., M.C. Thomas, P.E. Skelley & J.H. Frank, eds. American beetles, Vol. 2. Polyphaga: Scarabaeoidea through Curculionoidea, pp. 722–815. Boca Raton, FL, CRC Press.	European Union This reference is not cited in the text. Category: EDITORIAL	Incorporated. Anderson (2002) is now cited at the same location as the Oberprieler et al., 2007 citation in para 79.
122	210	Anderson, R.S. 2002. Family 131. Curculionidae Latreille 1802. In: R.H. Arnett, Jr., M.C. Thomas, P.E. Skelley & J.H. Frank, eds. <i>American beetles</i> , Vol. 2. <i>Polyphaga: Scarabaeoidea through Curculionoidea</i> , pp. 722–815. Boca Raton, FL, CRC Press.	EPPO This reference is not cited in the text. Category: EDITORIAL	Incorporated. Anderson (2002) is now cited at the same location as the Oberprieler et al., 2007 citation in para 79.
123	211	CABI. 2017. <i>Conotrachelus nenuphar</i> (plum curculio) datasheet. Invasive Species Compendium. Wallingford, UK, CABI. Available at http://www.cabi.org/isc/datasheet/15164 (last accessed 14 March, 2017).	Viet Nam Vietnam would like to add more reference Category: EDITORIAL	Considered, but not incorporated General information from this reference is redundant as it is included in CABI 2017 reference.

#	Para	Text	Comment	SC's response
124	211	CABI. 2017. Conotrachelus nenuphar (plum curculio) datasheet. Invasive Species Compendium. Wallingford, UK, CABI. Available at http://www.cabi.org/isc/datasheet/15164 (last accessed 14 March, 2017). CABI and EPPO. EPPO quarantine pest: Data Sheets on Quarantine Pests: Conotrachelus nenuphar. CABI and EPPO for the EU under Contract 90/399003 (https://www.eppo.int/QUARANTINE/data_sheets/insects/CONHNE_ds.pdf)	Viet Nam Category : EDITORIAL	Considered, but not incorporated General information from this reference is redundant as it is included in CABI 2017 reference.
125	216	Leskey, T.C. & Wright, S.E. 2007. Host preference of the plum curculio. <i>Entomologia Experimentalis et Applicata</i> , 123(3): 217–227. Lin, G.W., Lu, S.L., Huang, T.Y., Shih, C.L., Wu, W.J. & Chang, C.C. 2008. Molecular identification of weevils significant for customs inspection and quarantine importance. Formosan Entomologist, 28:43-55.	China This paper will help the molecular identification for this species. Category: TECHNICAL	Considered, but not incorporated The Lin et al 2008 study developed test but did not demonstrate specificity of test for <i>C. nenuphar</i> using related weevils. This test might not be appropriate for reliable identification of the pest.
126	223	9. Figures	United States of America Would be helpful to include the figures as large as possible Category: SUBSTANTIVE	Modified. Most images are sized to maximize use given resolution on page. However the sizes of Figures 5, 6 and 8 were enlarged.
127	228		New Zealand could consider replacing black arrows of cirlces on dark backgrounds with a lighter colour to make easier to see. Category: TECHNICAL	Incorporated.
128	228		Australia Proposed reference - Photo: Pest and Disease Image library, http://www.padil.gov.au/pests-and- diseases/pest/main/135999 Category: EDITORIAL	Considered, but not incorporated This image was stored on bugwood.org for use. If available at multiple sources we are using the source accessed by the author
129	228	The arrow for scape is wrong.	China The arrow for scape is aimed to rostrum instead of antenna. Category: EDITORIAL	Considered, but not incorporated. This arrow is correctly placed. The scape is inserted in a grove on the rostrum

#	Para	Text	Comment	SC's response
130	229		United States of America You may want to enlarge the image so that the different structures are easily visible. Category: TECHNICAL	Modified. The size of image (Figure 6) has been enlarged but the three structures labelled are as clear as they were before.
131	230	The arrow for metaunci should be more accurate.	China The arrow for metaunci is inaccurate. Category: EDITORIAL	Incorporated.
132	231		Australia Proposed reference - Photo: Pest and Disease Image library, http://www.padil.gov.au/pests-and-diseases/pest/main/135999 Category: EDITORIAL	Considered, but not incorporated This image was stored on bugwood.org for use. If available at multiple sources we are using the source accessed by the author
133	233		United States of America The arrows are not pointing to the uncus in 10A and B Category: TECHNICAL	Incorporated.
134	233	The arrow for metaunci should be more accurate.	China The arrow for metaunci is inaccurate. Category: EDITORIAL	Incorporated.
135	234	The arrow for abdominal sterna is wrong.	China The arrow for abdominal sterna is aimed to elytron instead of sterna. Category: EDITORIAL	Modified. The arrow is replaced with a line connected to a circle, which delineates the structure.
136	235		European Union Fig. 12C absent. Please, add illustration or delete mentioning to the figure. Category: TECHNICAL	Incorporated.
137	235		Russian Federation Fig. 12C absent. Please, add illustration or delete mentioning to the figure. Category: TECHNICAL	Incorporated.
138	235		Fig. 12C absent. Please, add illustration or delete mentioning to the figure. Category: TECHNICAL	Incorporated.
139	235	The arrow for abdominal sterna is wrong.	China The arrow for abdominal sterna is aimed to elytron instead of sterna. Category: EDITORIAL	Modified. The arrow is replaced with a line connected to a circle, which delineates the structure.

#	Para	Text	Comment	SC's response
140	236		Japan Move all arrows correctly. Category: EDITORIAL	Incorporated. (Figure 13)
141	237		United States of America J in juglandis is not itilicized Category: EDITORIAL	Incorporated.
142	237	Figure 14. Conotrachelus juglandis adult:	China The first letter of the specific name, j, should be printed in italic. Category: EDITORIAL	Incorporated.
143	238		United States of America It is with Conotrachelus corni that C. nenuphar may be most readily confused based on the images provided. We suggest to indicate using the arrows for non-C. nenuphar species the features that differ among the species. What is the difference between C. nenuphar and C. corni, for example? We are attaching Brown's original description of C. corni. Also, in Schoof's key, the prominence of the mesoscutellum and its declivity separates nenuphar and buchanani from albicinctus, iowensis, and corni. This character Fcorni should be included and pointed out. Category: TECHNICAL	Considered, but not incorporated. Tables 2 and 3 provide the characters needed to perform identification. Guidance on characters for comparison of species is provided in para 102. This includes mesoscutellum declivity as character for identification.
144	239		Japan Show the area of "Abdominal sterna" using a bracket such as Fig.15. It is important to clarify the area of "Abdominal sterna" for identification. Category: TECHNICAL	Incorporated.