

## COMUNICACIÓN

### The genus *Arhopalus* Serville, 1834 (Insecta: Coleoptera: Cerambycidae: Aseminae) in association to *Sirex noctilio* in Argentina

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Two species of the genus *Arhopalus* Serville, 1834 (Insecta: Coleoptera: Cerambycidae: Aseminae) are presently recorded from Argentina: *A. rusticus rusticus* (Linnaeus, 1758), and *A. syriacus* (Reitter, 1895). Both species develop in *Pinus elliottii* Engelm. [Pinaceae] after infestations of *Sirex noctilio* (Fabricius, 1793) [Hymenoptera: Siricidae] in the province of Córdoba, Argentina.

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**Key words:** wood borers, *Pinus*, Calamuchita, Córdoba, South America.

## INTRODUCTION

*Arhopalus* Serville, 1834 (Coleoptera: Cerambycidae: Aseminae) is a genus proper to the Northern Hemisphere, whose larvae develops in diverse coniferous trees (LINSLEY, 1962; VILLIERS, 1978).

Three species of the genus were introduced in the Australasian region: *Arhopalus rusticus* (Linnaeus, 1758) [= *A. tristis* (Fabricius, 1787)], and *A. syriacus* (Reitter, 1895) into Australia, and *A. ferus* (Mulsant, 1839) into New Zealand (WANG and LESCHEN, 2003). Very recently, *A. rusticus* was recorded as introduced and established in Argentina (DI IORIO, 2004, 2005), the first record of the subfamily Aseminae Thomson, 1864 in South America. TURIENZO (2007) records *A. rusticus* from a new locality in Argentina,

and gives the first know host plant in the country.

Other insect that affects pine plantations, *Sirex noctilio* (Fabricius, 1793) [Hymenoptera: Siricidae], was first found in Uruguay [1980/1981]. From here it passes to Entre Ríos: Dto. Gualeguaychú, Puerto Unzué, Ea. "El Potrero" [1985/1986], and towards the west in Córdoba: Calamuchita [1994], and towards the north, in Corrientes: Paso de los Libres [1993], and Misiones: San Vicente [1995] (VIZCARRA SÁNCHEZ and REVILLA, 1997). It was also detected in Jujuy [1994] (QUINTANA DE QUINTEROS and VILTE, 1996a), and Salta [1994] (QUINTANA DE QUINTEROS and VILTE, 1996b). The dispersal of *Sirex noctilio* towards the south, first in Buenos Aires, and afterwards to Río Negro, was aided with the commerce of unprocessed

boles of *Pinus* (VIZCARRA SÁNCHEZ and REVILLA, 1997).

In the Calamuchita Valley (Córdoba, Argentina), with afforestations of *Pinus elliottii* Engelm. [Pinaceae] more than 30 years old (LÓPEZ *et al.*, 2004), increasing amounts of damage in the boles were observed since the year 2006. Specimens of *Arhopalus* from this area shows that not only *A. rusticus* is established in the country (LÓPEZ *et al.*, 2007). These new materials are the subject of the present contribution.

## MATERIAL AND METHODS

Pieces of pine wood [*Pinus elliottii* Engelm., Pinaceae] were collected in the area of the Calamuchita Valley after they were infested by *S. noctilio* and maintained in rearing cages at ambient temperature. A bole of 1 m length was kept in each rearing cage, 7 from Alpa Corral and 12 from 20 km from Villa General Belgrano.

Species of *Arhopalus* were identified following the key of VILLIERS (1978), LINSLEY (1962), and WANG and LESCHEN (2003). Voucher specimens are housed in the personal collection of OSVALDO DI IORIO (ODI), and ADLIH LÓPEZ (ABRC) Facultad de Agronomía, Universidad Nacional de Río Cuarto, Río Cuarto, Córdoba, Argentina.

## RESULTS AND DISCUSSION

*Arhopalus rusticus rusticus* (Linnaeus, 1758)

ARGENTINA: Entre Ríos: Colonia Hughes [2005] (TURIENZO, 2007); Buenos Aires: San Miguel [2000], Pinamar [2000], Del Viso [2003], Capital Federal, intercepted from China [2003] (DI IORIO, 2004); Pilar [1999], Valeria del Mar [2004] (TURIENZO, 2007).

Host plant: *Pinus elliottii* Engelm. [BA: Valeria del Mar] (TURIENZO, 2007).

New material examined: ARGENTINA: Córdoba: 20 km from Villa General Belgrano (Calamuchita Valley), X-2006, Magris, Demaestri, Lopez y Garcia leg., 294 exx.

(ABRC), 56 exx. (ODI) emerged from dead standing trees of *Pinus elliottii*, previously infested by *S. noctilio*.

Emergence period: emergences in laboratory were since 11th October 2006 until 30th January 2007. Peaks were produced at middle December 2006.

Remarks: *A. rusticus rusticus* was very recently recorded infesting a structural timber (*Pinus elliottii*) in a house (TURIENZO, 2007). Now it was found infesting pine trees of the same species after *S. noctilio* in the province of Córdoba: 20 km from Villa General Belgrano (new record). From the 12 rearing cages, emergences were produced in 11 of them, all specimens belonging to *A. rusticus*. Total specimens emerged by rearing cage were 33, 1, 8, 3, 1, 119, 13, 78, 27, 13, and 4.

*Arhopalus syriacus* (Reitter, 1895)

Material examined: ARGENTINA: Córdoba: Alpa Corral (Calamuchita Valley), X-2006, Magris, Demaestri, LOPEZ & GARCIA leg., 87 exx. (ABRC), 2 exx. (ODI) emerged from dead standing trees of *Pinus elliottii*, previously infested by *Sirex noctilio*.

New Country record: ARGENTINA (Córdoba: Alpa Corral).

Remarks: *A. syriacus* can be distinguished from *A. rusticus* by the shape of the last article of the maxillary palpi, strongly securiform in *A. syriacus*, slightly widened apically in *A. rusticus*, and by the internal apical angle of the elytra, rounded in *A. syriacus*, and angulated, sometimes with a very minute spine in *A. rusticus* (VILLIERS, 1978; WANG and LESCHEN, 2003).

*Pinus elliottii* is the first known host plant in the country for this species, recorded here by first time. *A. syriacus* generally infests pine trees debilitated or killed by fire or other damage with no evidence of injuring healthy trees (WANG and LESCHEN, 2003). In this case, pine trees have been previously infested by *Sirex noctilio*, also recorded in Calamuchita Valley since 1994 (VIZCARRA SÁNCHEZ and REVILLA, 1997). *A. syriacus* emerge in the same emergence period that of

*A. rusticus* but only from Alpa Corral. It is noticeable that both *A. rusticus* and *A. syriacus* have the same host and emergence period but they rear separately one from another. From the 7 rearing cages, emergences were produced in only 3 of them: 28, 53, and 8 specimens in each.

## RESUMEN

LÓPEZ, A., J. GARCÍA, M. DEMAESTRI, O. DI IORIO, R. MAGRIS. 2008. El género *Arhopalus* Serville, 1834 (Insecta: Coleoptera: Cerambycidae: Aseminae) asociado a *Sirex noctilio* en Argentina. *Bol. San. Veg. Plagas*, **34**: 529-531.

Dos especies del género *Arhopalus* Serville, 1834 (Insecta: Coleoptera: Cerambycidae: Aseminae) se presentan en Argentina: *A. rusticus rusticus* (Linnaeus, 1758) y *A. syriacus* (Reitter, 1895). Ambas especies se desarrollan en *Pinus elliottii* Engelm. [Pinaceae] luego de la infestación de *Sirex noctilio* (Fabricius, 1793) [Hymenoptera: Siricidae] en la Provincia de Córdoba, Argentina.

**Palabras clave:** taladros de la madera, *Pinus*, Córdoba, América del Sur.

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