

The genus *Neoclytus* Thomson, 1860 (Coleoptera: Cerambycidae: Clytini) in Argentina

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Abstract: Fourteen species of *Neoclytus* Thomson, 1860 occur in Argentina: *N. armaticollis* Zajciw, *N. aulai* Bruch, *N. centurio* (Chevrolat), *N. curvatus* (Germ.), *N. delicatus* (Gounelle), *N. famelicus* (Burmeister), *N. guianensis* (Laporte & Gory), *N. mulleri* Fuchs, *N. patagonicus* (Bruch) *comb. nov.*, *N. pusillus* (Laporte & Gory), *N. rufus* (Olivier), *N. sobrinus* (Laporte & Gory), *N. stillatus* Aurivillius (= *N. parumnotatus* Zajciw *syn. nov.*) and *N. ypsilon* (Chevrolat). *N. armaticollis*, *N. delicatus* and *N. stillatus* are new records for Argentina. The geographical distribution in Argentina and a key for species are given.

Key Words: Argentina, Coleoptera, Cerambycidae, *Neoclytus*.

Introduction

The worst obstacle for the revision of *Neoclytus* concerns the scarcity of specimens of this genus in entomological collections. Many of its species are only known through type specimens (*N. armaticollis*, *N. stillatus*, and *N. mulleri*), and some species are even known from a single individual (*Neoclytus aulai* and *N. patagonicus*). The integument colour may vary: in some specimens of *N. pusillus* and *N. sobrinus* can be reddish or black, while in all *N. curvatus* and *N. stillatus* specimens are testaceous, except for a single black specimen of the latter species. All known specimens of *N. rufus* are reddish. All species have bands or spots formed by a very dense short pubescence of yellow color. Position, number, and shape of these bands and spots are constant for each species, thus allowing an easy recognition of the species even with naked eye, and making unnecessary the observation of more demanding morphological characters. The lack of spots (*N. stillatus* and *N. curvatus*) or the fusion of some bands in some specimens (*N. pusillus*) is very infrequent. The bands can vary, mainly in their width. It is thus preferable to identify the species through large series of specimens or when adults just emerge. Known geographical distributions are summarized by Monne (1993) in his catalogue. The present contribution enumerates a total of 14 species of *Neoclytus* in Argentina, including three new records, with a synonym and new combinations. *N. armaticollis*, *N. mulleri* and *N. stillatus* are illustrated for the first time. The geograph-

ical distribution in Argentina and a key for species are also given.

Materials and Methods

Collections examined: AM: Antonio Martínez, Rosario de Lerma, Salta; B: Carlos Bruch (MACN); BURM: Hermann Burmeister (MACN); E: Entomología, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires; IML: Instituto Miguel Lillo, Tucumán; LF: Luis Fortich, Buenos Aires; MACN: Museo Argentino de Ciencias Naturales "Bernardino Rivadavia", Buenos Aires; MLP: Museo de La Plata, Buenos Aires; ODI: Oswaldo Di Iorio, Buenos Aires; OG: Oscar Gonzalez, Charata, Chaco; P: Glorinaldo Pellerano (MACN); Z: Mateo Zelich, Liebig, Entre Ríos.

An "L" in brackets after collection date, indicates that such a specimen was collected as a larva inside its host plant and afterwards emerged as an adult in the laboratory. The species marked with an asterisk(*) are new records for Argentina; specimens of neighbouring countries to Argentina are also included in the examined material. All the observed specimens were determined by the author, except for those indicated in each case.

* *Neoclytus armaticollis* Zajciw, 1964
(Figs. 11, 23)

Known geographical distribution: BOLIVIA: Buenavista, type locality (Zajciw, 1964; Monné, 1993: cat.).

Diagnosis: Margins of pronotum armed with a conical tooth at the middle of his length.

Examined material: ARGENTINA: **JuJuy:** Richter leg., 2 (ODI).

***Neoclytus aulai* Bruch, 1911**

(Figs. 2, 18, 25)

Known geographical distribution: ARGENTINA: Santa Fe, La Gallareta (Chacoan area of Santa Fe), Aula leg. (Bruch, 1911; Monné, 1993: cat.).

Diagnosis: pronotum covered by yellow pubescence except a glabrous area as in the figure 25; elytra truncate at the apex (Fig. 18).

Examined material: 1 ex., HOLOTYPE in Bruch's collection (MACN) with the following data: "Argentina Gob. Misiones 190- Bruch leg." (white label printed), "Typus" (sky blue label printed), "*Neoclytus aulai* Bruch tipo" (manuscript by Bruch).

There is no doubt that the specimen in Bruch's collection is the species type, since it was the only specimen known at that time. Taking into account that the data given by Bruch in his description are very precise and include collector, the different locality reported in the label may be a labelling mistake. The type specimen lacks tarsi and some antennomeres owing to the fact that this individual was already dead when collected. Because of its conformation, particularly the elytron, this species probably belongs to a new genus, but without new material, it is preferable to maintain its generic status.

***Neoclytus centurio* (Chevrolat, 1861)**

(Figs. 1, 12, 13)

Known geographical distribution: BRAZIL (Chevrolat, 1861; Gounelle, 1911; Blackwelder, 1946; Buck, 1959; Zajciw & Campos Seabra, 1968); URUGUAY (Zajciw & Ruffinelli, 1962); Misiones: Loreto, Puerto Bemberg (Bosq, 1943a).

Diagnosis: Pronotum without pubescent bands; apex covered by a greenish pubescence.

Examined material: ARGENTINA: **Misiones:** Loreto, Exp. St., Oglobin leg., 1 ex. (MACN); 2 de Mayo XI-1973 Williner leg., 1 ex. (ODI); Cataratas X-54 De Carlo & Viana leg., 2 exs. (ODI); Santa

Maria Viana leg. X-44, 2 exs., X-45, 4 exs., X-46, 5 exs., X-47, 3 exs., X-48, 5 exs., X-52, 1 ex., X-53, 2 exs. (MLP); Puerto Rico 5 to 13-XI-1970 Porter & Stange leg., Malaise trap, 3 exs. (IML); Garuapé Stream 1992 D'Alessandro leg., 1 ex. (ODI); PARAGUAY: Itapúa XI-56 Cantera leg., 3 exs. (ODI).

***Neoclytus curvatus* (Germar, 1821)**

(Figs. 2, 7, 20)

Known geographical distribution: BRAZIL (Gounelle, 1911; Buck, 1959; Silva, 1968; Zajciw & Campos Seabra, 1968); PARAGUAY (Bosq, 1945; Viana, 1972); URUGUAY (Bosq & Ruffinelli, 1951; Zajciw & Ruffinelli, 1962); ARGENTINA (Blackwelder, 1946); Buenos Aires, Misiones (Bruch, 1912).

Diagnosis: Intermediate pubescent band of the pronotum divided in four spots (Fig. 20); elytral pattern as in figure 7.

Examined material: ARGENTINA: **Misiones:** no other data, 2 exs. (B); Bompland, Jørgensen, 1 ex. (B); Cataratas, Viana leg., 1 ex. (ODI); Puerto Esperanza II-XII-76 Williner leg., 1 ex. (ODI); Cataratas X-54, 6 exs. (MACN); Pindapoy XII-1942 Bridarolli leg., 2 exs. (ODI); Puerto Iguazú, Bridarolli leg., XI-1944, 3 exs., 29-I-44, 3 exs., II-44, 1 ex., 17-I-43, 1 ex. (ODI); 2 de Mayo XI-73 Williner leg., 3 exs. (ODI); El Dorado. Bridarolli leg., 1 ex. (ODI); El Dorado 21-IV-92, 1 ex., 3-I-94, 1 ex. (ODI); 25 de Mayo XI-1946 Viana leg., 1 ex. (MACN); Piflalito, De Carlo & Viana leg., 1 ex. (MACN); San José 18-III-23 (MACN); Santa Maria, Viana leg., X-44, 3 exs., X-45, 4 exs., X-46, 2 exs., X-47, 4 exs., X-48, 3 exs., XI-48, 1 ex., X-52, 2 exs., X-53, 3 exs. (MLP); Santo Pipo XI-1952 De Haller leg., 1 ex. (IML); Puerto Bemberg, Hayward, Willink & Golbach leg., 12 to 29-I-1945, 8 exs., 14 to 30-III-1945, 3 exs. (IML); Garuapé Stream 8-III-1991, 1 ex., 12-III-1992, 1 ex. (ODI); Route 14, Salto Golondrina (20 km S San Vicente) III-1994, 1 ex. (ODI); **Chaco:** Colonia Benitez, 1 ex. (ODI); **Formosa:** no other data, Bruch leg., 1 ex. (B); **Corrientes:** Santo Tomé, no date, 5 exs. (P), X-1924, 1 ex. (P), VII-1927, 1 ex. (B), IX-27, 1 ex. (P), I-1928, 1 ex. (MACN); San Cayetano X-84, 1 ex. (MACN); Las Marias Ea. Virasoro, Porter leg., 1 ex., 5-IX-1971 Porter & Stange leg., 2 exs. (IML); **Entre Ríos:** Salto Grande 25-IX-76 Williner leg., 1 ex. (ODI); Liebig, Zelich leg., 3 exs. (ODI), 3 exs. Z; **Buenos Aires:** Bruch leg., 1 ex. (B); BRAZIL: National Park

Sooretama XI-1962 Martínez A. leg., 1 ex. (AM); São Paulo State, Cerquema César I-1889 Gounelle leg., 1 ex. (B); S. Boria XI-1922, 2 exs. (P).

The citation from Tucumán (Bruch, 1912) must refer to *N. stillatus* Auriv.; 2 specimens in Bruch's collection (MACN), placed among specimens of *N. curvatus*, are *N. stillatus*. As can be seen in figure 2, the distribution of both species is disjunct, one species being at each side of the Chacoan Phytogeographical Province (Prado, 1991). *N. curvatus* is distributed in the Paranean forest along the course of the Uruguay River, down to Buenos Aires to the south, related to the gallery forest along the river margins. It also occurs in the transitional forest of the Province of Chaco (Colonia Benítez), which was excluded from the concept of Chaco *sensu stricto* (Prado, 1991).

* *Neoclytus delicatus* (Gounelle, 1911)

(Figs. 15, 24, 27)

Known geographical distribution: BRAZIL (Blackwelder, 1946); Pernambuco, Serra de Comunaty, type locality (Gounelle, 1911); URUGUAY (Zajciw & Ruffinelli, 1962).

Diagnosis: Three pubescent yellow bands on pronotum, the intermediate interrupted at the middle (Fig. 24); four last antennomeres fused (Fig. 27); elytral pattern as in figure 15.

Examined material: ARGENTINA: **Misiones:** Departamento Concepción, Santa María Viana leg., X-1948, 3 exs., X-1952, 1 ex. (MLP).

Gounelle (1911) interpreted the antennae as 10-segmented, with the apical three antennomeres fused, and a comb marking the remnants of sutures. In reality, antennae are 11-segmented, with the distal four antennomeres fused, but having sutures that allow for their discrimination (Fig. 27).

Neoclytus famelicus (Burmeister, 1865)

(Figs. 3, 4)

Known geographical distribution: BRAZIL (Buck, 1959); URUGUAY (Bosq & Ruffinelli, 1951; Zajciw & Ruffinelli, 1962; Ruffinelli & Monné, 1968); PARAGUAY (Bosq, 1945; Viana, 1972); ARGENTINA: **Misiones** (Bruch, 1912); Loreto (Bosq, 1943a); **Tucumán:** (Burmeister, 1865; Bruch, 1912); **Córdoba:** El Sauce, Santa Rosa, Los Molinos (Viana & Williner, 1974); Santiago del Estero: Sumampa

(Prosen, 1947); Mendoza (Macola & Saez, 1986).

Diagnosis: Pronotum without pubescent bands; elytral pattern as in figure 4.

Examined material: ARGENTINA: **Salta:** Coronel Moldes II-1945 Monrós leg., 1 ex. (IML); **Tucumán:** "Tucumán" (green label printed), "542", 1 ex. HOLOTYPUS (BURM); no other data, Bruch leg., XII-1899, 1 ex. (B), II-1906, 1 ex. (B); Capital 30-I-1939, 1 ex., 26-I-1939, 2 exs. (IML); Los Bulacio 30-I-1948 Ares leg., 2 exs. (IML); La Soledad (Cañete) 4-XI-1966 Bucher leg., 1 ex. (IML); 11 km from Las Cejas 24-IX to 17-X Stange leg., I (IML); **Catamarca:** 6 km N of Belén 1240 m a.s.l. 15-IX-1969 Willink, Terán & Stange leg., Malaise trap, 1 ex. (IML); **La Rioja:** Giacomelli leg., 1 ex. (MACN); **Chaco:** Chaco National Park 2-II-90 Di Iorio leg., 12 exs. (ODI); Charata: 21-IV-1 González leg., 1 ex. (OG), 1 ex. (ODI); 14-I-92 (L) Di Iorio leg., 16 exs. (ODI); 6-I-93 (L) Di Iorio leg., 8 exs. (ODI); Armonía 13-X-91 (L) González leg., 42 exs. (OG), 32 exs. (OD) **Misiones:** Breyer leg. 1 ex. MACN - San Ignacio, B. & W. Bade leg., 2 exs. (B); Departamento Concepción, Santa María, Viana leg., X-44, 1 ex., X-46, 2 exs., X-47, 1 ex., X-48, 2 exs., X-52, 1 ex. MLP - Puerto Iguazú 14-1-44 Williner leg. 1 ex. (ODI) **Corrientes:** Paraná River, Noguera Island 30-VII-1990 (L) Di Iorio leg., 1 ex. (ODI); Santo Tomé II-1924, 1 ex. (P), 11-1925, 8 exs (P), XI-1926, 3 exs. (P), XII-1923, 1 ex. (P); **Entre Ríos:** Liebig 1-1975 Fortich L. leg., 1 ex. (Ent), 2 exs. (LF); Liebig, Zelic leg., 1 ex. (ODI); Concordia, Salto Grande I-1975 Martínez A leg., 1 ex. (AM); **Buenos Aires:** Pdo. Pilar, Villa Rosa 20 29-XII-89 (L) Di Iorio leg., 41 exs. (ODI); San Miguel XII-195 Pellerano leg., 1 ex. (ODI); National Route 2, km 83.5 1-XI-9 (L), Di Iorio leg., 11 exs. (ODI); **BRAZIL:** Foz do Iguazú 10-XII-92 (L) Di Iorio leg., 40 exs. (ODI) .

* *Neoclytus mulleri* Fuchs, 1955

(Figs. 2, 16, 24, 26)

Known geographical distribution: BRAZIL, PARAGUAY (Fuchs, 1955)

Diagnosis: Three pubescent yellow bands on pronotum, the intermediate interrupted at the middle (Fig. 24); three last antennomeres fused (Fig. 26); elytral pattern as in figure 16.

Examined material: ARGENTINA: **Salta:** El Brete 7-V-94 (L), Di Iorio leg., 1 ex. (ODI); **Tucumán:** no other data, 1 ex. (ODI) *Neoclytus* sp. Bosq det.; Santa

Bárbara, Lules River XI-1908 1 ex. (ODI); **Chaco**: Tres Estacas 12-IX-1991 Di Iorio leg., 1 ex. (ODI); Charata 13-X-1991 González leg., 2 exs. (OG), 1 ex. (ODI); San Bernardo 8-III-1991 (L) Di Iorio leg., 1 ex. (ODI); **Córdoba**: no other data, 1 ex. (ODI).

Fuchs (1955) interpreted the antennae of *N. mulleri* as 10-segmented, and split it from *N. delicatus* by having the distal three segments longer and not so clearly fused. The antennae seem to be 10-segmented, but they really are 9-segmented: antennomere IX is partially fused with X, and antennomere XI is totally fused with X (Fig. 26). The examined specimens present a fair agreement with the original description, therefore they are assigned to this species.

***Neoclytus guianensis* (Laporte & Gory, 1836)**

Known geographical distribution: GUYANA (Laporte & Gory, 1836); VIANA, 1972); VENEZUELA, ARGENTINA: Misiones (Viana, 1972).

***Neoclytus patagonicus* (Bruch, 1911)
comb. nov.** (Fig. 14)

Known geographical distribution: ARGENTINA: Chubut (Bruch, 1911; Monné, 1993: cat.).

Diagnosis: Pronotum without pubescent yellow bands; elytra with two bands, one basal and the other preapical, and one spot in each elytron (Fig. 14).

Examined material: ARGENTINA: "Gob. Chaco C. Bruch leg." (white label printed), -Typus- (sky blue label printed), "*Mecomtopus patagonicus* Bruch tipo" (manuscript by Bruch).

Originally described under the genus *Mecomtopus*, the conformation of hind legs and elytra, situate this species more properly in the genus *Neoclytus*. When Bruch (1911) illustrated his specimens, unexplainably he represented shorter hind legs than real. Concerning the locality label, the same consideration made for the type of *N. aulai* is herein valid.

***Neoclytus pusillus* (Laporte & Gory, 1836)
(Figs. 3, 5, 6, 19)**

Known geographical distribution: BRAZIL (Gounelle, 1911; Laporte & Gory, 1836; Buck, 1959; Zajciw, 1967; Silva, 1968 in Viana, 1972); San Carlos (Penteado-Dias, 1979); URUGUAY (Bosq & Ruffinelli, 1951; Zajciw & Ruffinelli, 1962; Ruffinelli & Mon-

né, 1968); PARAGUAY (Viana, 1972); ARGENTINA (Blackwelder, 1946): Buenos Aires, Misiones (Bruch, 1912); BOLIVIA (Monné, 1993: cat.).

Diagnosis: Pronotum with one pubescent yellow band at his base; elytral pattern as in figures 5 and 6.

Examined material: ARGENTINA: **Jujuy:** no other data, Bruch leg., 3 exs. (MACN); Caimancito 20-X-1977 E.R.B. leg., 2 exs. (IML); **Salta:** Carapari 31-I-45 Williner leg., 4 exs. (ODI); Urundel XII-1981 Genise leg., 5 exs. (ODI); Orán 23-XI-1948 Monrós leg., 1 ex. (IML); Tartagal 20-II-1945, 1 ex. (IML); Departamento Anta, Buen Lugar 40 km E of Las LaJitas 2-II-1980 Golbach leg., 1 ex. (IML); Urundel XII-1981 Dominguez leg., 4 exs. (IML); Departamento San Martin, Dique Itiyuro XII-1970 Martinez leg., 4 exs. (AM); Tabacal I-45 Williner leg., 1 ex. (ODI); **Tucumán:** no other data II-1906 Bruch leg., 1 ex. (B); Capital (gardens IML) 28-IX-1948 Golbach leg., 1 ex. (IML); **Formosa:** no other data, Bruch leg., 2 exs. (B); **Misiones:** no other data, Bruch leg., 1 ex. (B); Loreto, Oglobin leg., 2 exs. (B); San Ignacio, B. & W. Bade leg., 1 ex. (B); Departamento Concepción, Santa Maria, Viana leg., X-43, 6 exs., X-44, 5 exs., X-45, 2 exs., X-46, 2 exs., X-47, 2 exs., X-48, 2 exs., X-52, 2 exs., XI-52, 2 exs., X-54, 2 exs., X-56, 4 exs. (MLP); Santa Maria X-53 Viana leg., 3 exs. (ODI); 2 de Mayo IX-78 Fritz leg., 1 ex. (ODI); Pepirí 8-III-1992, 1 ex. (ODI); El Dorado 14-III-1992, 1 ex. (ODI); Garupapé 21-X-1992, 1 ex. (ODI); **Corrientes:** Ituzaingó 8-XII-1981 Williner leg., 1 ex. (ODI); Santo Tomé, XI-1923, 3 exs., III-1924, 1 ex., X-1924, 1 ex., XI-1924, 2 exs., XI-1925, 1 ex., XI-1926, 1 ex. (P); **Entre Ríos:** Pronunciamento XI-1969 Zelich leg., 1 ex. (AM); Liebig, Zelich leg., 12 eje. (Z); **Buenos Aires:** no other data, 5-I-1907 Bruch leg., 1 ex. (MACN); km 26, F.C.G.B. XII-1989 Di Iorio leg., 2 exs. (ODI); San Isidro Harbour, Martínez leg., XI-1972, 1 ex., I-1979, 1 ex. (AM); BOLIVIA: Santa Cruz: Est. Exp. General Saavedra VIII-1973 Porter & Stange leg., 2 exs. (IML); El Cidral 1 to 28-I-1962 Golbach leg., 1 ex. (IML).

***Neoclytus rufus* (Olivier, 1795)
(Figs. 1, 17)**

Known distribution: COLOMBIA (Laporte & Gory, 1836; Blackwelder, 1946); VENEZUELA, BRITISH GUYANA (Blackwelder, 1946); GRENADA, TRIN-

IDAD (Duffy, 1960); PARAGUAY (Bosq, 1945; Viana, 1972); ARGENTINA: Formosa (Bosq, 1943b; Viana, 1972); PANAMA (Giesbert, 1989).

Diagnosis: Reddish integument; pronotum always without bands; whitish elytral bands (Fig. 17).

Examined material: ARGENTINA: **Salta:** Las Lajitas 15-XII-91 (L) Di Iorio leg., 71 exs. (ODI); **Formosa:** Ingeniero Juárez 17-XII-91 (L) Di Iorio leg., 2 exs. (ODI); **Chaco:** Charata: González leg., 10-IV-91, 1 ex., 14-IV-91, 3 exs., 24-IV-91, 2 exs., 30-IV-91, 1 ex., 3-V-91, 2 exs. (ODI, OG); 14-I-92 (L) Di Iorio leg., 9 exs. (ODI); Resistencia, Zurlo leg., 1 ex. (ODI); San Bernardo 8-III-91 (L) Di Iorio leg., 1 ex. (ODI), 2 exs. (OG), 30-VIII-1992 (L), 2 exs. (ODI); La Armonia 13-X-91 (L), González leg., 21 exs. (OG), 20 exs. (ODI); **Corrientes:** Paraná River, Noguera Island, Di Iorio leg., 30-VIII-90 (L), 23 exs. (ODI), 4 to 5-IX-91 (L), 3 exs. (ODI); **BRAZIL:** Matto Grosso, no date or collector, 2 exs. (MLP); **VENEZUELA:** Est. Aragua, Maracay, El Limón V-1978 G. & H. Martínez leg., 1 ex. (AM); Higueroite (beach) 18-III-1962 Bordón leg., 1 ex. (AM).

Neoclytus sobrinus (Laporte & Gory, 1836)
(Figs. 1, 10, 22)

Known geographical distribution: BRAZIL (Gounelle, 1911; Blackwelder, 1946; Buck, 1959); PARAGUAY (Viana, 1972); URUGUAY (Bosq & Ruffinelli, 1951; Zajciw & Ruffinelli, 1962; Ruffinelli & Monné, 1968); ARGENTINA (Blackwelder, 1946): Buenos Aires, Córdoba (Bruch, 1912); Santiago del Estero: Rapelli (Prosen, 1947); Córdoba: El Sauce, Santa Rosa, Los Molinos (Viana & Williner, 1974).

Diagnosis: Two yellow pubescent bands on pronotum, the apical entire and the basal interrupted at the middle (Fig. 22); elytral pattern as in figure 10.

Examined material: ARGENTINA: **Jujuy:** Yuto V-1957 Luna F. leg., 4 exs. (IML); Calilegua 12-II-1950 Willink & Monrós leg., 1 ex. (IML); **Salta:** Alemania, Weiser leg., 3 exs. (MACN); VI-1905 Bruch leg. (MACN); IV-1923 Weiser leg., 3 exs. (MACN); Urundel XII-1981 Genise leg., 1 ex. (ODI); Urundel XII-1981 Domínguez leg., 1 ex. (IML); Cabeza de Buey 24-VIII-91 (L) Di Iorio leg., 42 exs. (ODI); El Brete (Dto. Candelaria) 7-V-94 (L) Di Iorio leg., 8 exs. (ODI); **Tucumán:** no other data, 25-I-1938 Bruch leg., 4 exs. (MACN); Villa Benjamin II-1947 Budin O.

leg., 1 ex. (IML); Leales, Misto Stream 5-IX-1950, Ares. leg., 11 exs. (IML); Capital (gardens IML) 28-IX-1948 Golbach leg., 4 exs. (IML); Trancas, Tacanas XII-1946 Golbach leg., 1 ex. (IML); 11 km W of Las Cejas 1-1968 Stange leg., 4 exs. (IML); Dto. Tafi, Horco Molle XII-1967 Porter leg., 1 ex. (IML); Villa Nougues I-1941, 1 ex. (IML); Tafi Viejo, 1 ex. (MACN); Las Tipas 24-III-1992 (L) Di Iorio leg., 4 exs. (ODI); **Chaco:** Nueva Pompeya VIII-1977 Martínez H. leg., 1 ex. (AM); Chaco National Park 2-II-1990 (L), Di Iorio leg., 17 exs. (ODI); Charata: Gonzalez leg., 14-IV-91, 35 exs., 17-IV-91, 86 exs., 21-IV-91, 27 exs., 22-IV-91, 15 exs., 24-IV-91, 9 exs., 26-IV-91, 1 ex., 30-IV-91, 4 exs., 2-V-91, 1 ex., 3-V-91, 42 exs. (OG) (ODI); 18-IX-1991 (L) Di Iorio leg., 4 exs. (ODI); 14-I-92 (L) Di Iorio leg., 60 exs. (ODI); Tres Estacas B-IX-91 (L) Di Iorio leg., 15 exs. (ODI); **Santiago del Estero:** 16-XI-1948 Luna F. leg., 1 ex. (IML); Córdoba: Calamuchita, El Sauce, Viana leg., 1 ex. (MACN), XII-1938, 42 exs. (MLP); **Misiones:** Loreto, Oglobin leg., 1 ex. (MACN); San Ignacio, B. & W. Bade leg., 1 ex. (MACN); Santa Maria X-1945 Viana leg., 1 ex. (MLP); **Entre Ríos:** Liebig I-1975 Fortich leg., 1 ex. (E); **Santa Fe:** no other data, 6-V-59 Muhn leg., 1 ex. (ODI), 18-IX-40 Muhn leg., 1 ex. (ODI); Villa Ocampo, Pindo Stream 2-II-1946 Willink & Hayward leg., 1 ex. (IML); **Buenos Aires:** no other data, IV-1896 Bruch leg., 1 ex. (B); Vicente López XII-1946, 1 ex. (P); **La Pampa:** Luan Toro III-54 Capdeville leg., 2 exs. (ODI); **URUGUAY:** Montevideo 25-II-1909 J.B. leg., 1 ex. (MACN); **BOLIVIA:** Parapeti, 1 ex. (MACN); Taruma, Cochabamba, 50 km Santa Cruz 10-VII-1973, Porter & Stange leg., 1 ex. (IML); **PARAGUAY:** Dto. Boquerón, Cerro León X-1979 Martínez leg., 1 ex. (AM).

* *Neoclytus stillatus* Aurivillius, 1908
(Figs. 2, 8, 9, 21)

Known geographical distribution: BOLIVIA (Aurivillius, 1908; Blackwelder, 1946; Monné, 1993: cat.).

Neoclytus parumnotatus Zajciw, 1963: new synonymy

Known geographical distribution: ARGENTINA: Tucumán: Burruyacu, Villa Nougues (Zajciw, 1963; Monné, 1993: cat.).

Diagnosis: Four yellow spots on pronotum, each near the anterior and posterior angles (Fig. 21); elytral bands divided in small spots, except an entire preapical transverse band; a very small longitudinal

band on the apex of the elytra (Fig. 8); elytral pattern can be reduced to small yellow points (Fig. 9) and the pronotal spots disappeared.

Examined material: ARGENTINA: **Jujuy:** no other data, 1 ex. (MACN); **Salta:** Dto. Orán, Urundel XII-1947, 3 exs. (ODI); Jakulica Camp, 40 km W of Aguas Blancas, Porter leg., Malaise trap, 2 exs. (IML); **Tucumán:** no other data, Reed leg., 1 ex. (B); Villa Nogués, 1 ex. (MACN), I-1929, 1 ex. (B); Tafi Viejo II-1917 "16627" (Girard leg. ?), 2 exs. (MACN); Dto. Tafi, Horco Molle XI-XII-1967 Porter leg., 14 exs. (IML); Horco Molle, Porter leg., 26-XII-65, 1 ex., XII-1968, 1 ex., 2 to 9-X-1969, 2 exs., no date, 5 exs. (IML); Villa Nogués I-1929, 1 ex. (IML); Siambón III-1-1945 Diaz R. leg., 11-2 exs. (IML); Dto. Burreyacu, 7 de Abril Dam 10-I-1982 Golbach leg., 1 ex. (IML); Dto. Trancas, Ticucho 26-III-1983 Golbach leg., 3 exs. (IML); **Catamarca:** La Viña 22 to 25-II-1979 Golbach leg., 1 ex. (IML); BOLIVIA: Nor-Yungas, Caranavi, 1 ex. (ODI).

N. stillatus has remained undetermined in the IML and MACN collections until the present revision and is illustrated for the first time here. All the material from Argentina presents reddish integument, while the specimen from Bolivia is black except for its legs, antennae, labrum, and mandibles; on the other hand the bands of pronotum and elytra are similar in specimens from both countries. Colour differences are probably related with altitude (higher elevations corresponding to Bolivia), and the diurnal habits of *Neoclytus* species. This phenomenon also occurs in various Hymenoptera with similar distributions and habits (Fritz, com. pers.). Dark coloured integuments of Hymenoptera from high altitudes can absorb larger quantities of infrared radiation, thus activating the insect in a shorter time.

As already mentioned the pattern of bands is diagnostic and characteristic of each species, only the extension of some bands varies. The observed series of specimens of *N. stillatus* presents the typical pattern of the species (Fig. 8). A few specimens from the Province of Tucumán, have very scarce yellow pubescence (Fig. 9): the spots of the pronotum are completely absent or faint, and elytral spots are very reduced, some of them even absent (in particular, the apical longitudinal band of the elytra). This reduction corresponds to the description by Zajciw (1963) which complements the description of Aurivillius (1908), already quite clear, and allows to express the above proposed synonymy.

Neoclytus ypsilon (Chevrolat, 1861)

Known geographical distribution: BRAZIL, PARAGUAY, ARGENTINA (Monné, 1993: cat.).

Key to the Argentine species of *Neoclytus* (only for examined materials).

1. Prothorax always laterally unarmed, more or less globose 2
- 1'. Prothorax armed with a little conical tooth at both sides of the medial zone of margins (Fig. 23).. *armaticollis*
2. Integument reddish, never with yellow pubescent bands in the pronotum; elytral bands almost white (Fig. 17) *rufus*
- 2'. Integument black, with or without yellow pubescent bands or any other pattern in the pronotum; if integument reddish, pronotum always banded 3
3. Pronotum with transverse yellow pubescent bands, complete, interrupted, or reduced to spots; or the whole prothorax with yellow pubescence with glabrous areas 4
- 3'. Pronotum black, without yellow pubescent bands 10
4. Whole pronotum with yellow pubescence, with a central trident-shaped glabrous area (Fig. 18) *aulai*
- 4'. Pronotum with transverse yellow pubescent bands, complete, interrupted or reduced to spots 5
5. Pronotum with a single, complete, basal stripe (Fig. 19); elytra with an inverted Y between a tenuous humeral band (with which it may join) and a band at half of the elytral length (Fig. 5, 6) *pusillus*
- 5'. Pronotum with 2 or 3 transverse yellow bands. 6
6. Pronotum with 2 yellow bands, one apical, the other basal, complete, interrupted or reduced to spots at the anterior and posterior angles of the pronotum 7
- 6'. Pronotum with 3 transverse yellow bands: basal, intermediate, and apical, complete or interrupted 8
7. Apical band complete; posterior stripe narrow, broken at its centre and then diverging towards the anterior angles of the pronotum (Fig. 10). *sobrinus*

7. Apical band interrupted in its middle part and reduced to 2 lateral spots; basal band wide, reduced to 2 elongate spots at the posterior angles of the pronotum (Fig. 21) *stillatus*
8. Intermediate band divided into 4 spots (Fig. 20) *curvatus*
- 8'. Intermediate band interrupted only in its middle part; basal and apical bands complete (Fig. 23) 9
9. Distal 3 antennomeres fused (Fig. 26) *mulleri*
- 9'. Distal 4 antennomeres fused (Fig. 27) *delicatus*
10. Apex of elytra with yellow pubescence; middle part of elytra ornated with 2 bowed whitish lines (Figs. 12, 13) *centurio*
- 10'. Apex of elytra without yellow pubescence 11
11. Each elytron with a spot in its basal third, forming a scalene triangle with its larger side beside sutural margin, between a humeral band and a band at half elytral length; both spots together resemble a Y (Fig. 4) *famelicus*
- 11'. Each elytron with a small yellow spot in its base; another slightly larger spot, with its posterior margin strait from suture to almost the external margin, and a more or less wide preapical band, descending from suture to the margin (Fig. 14) *patagonicus*

Acknowledgements

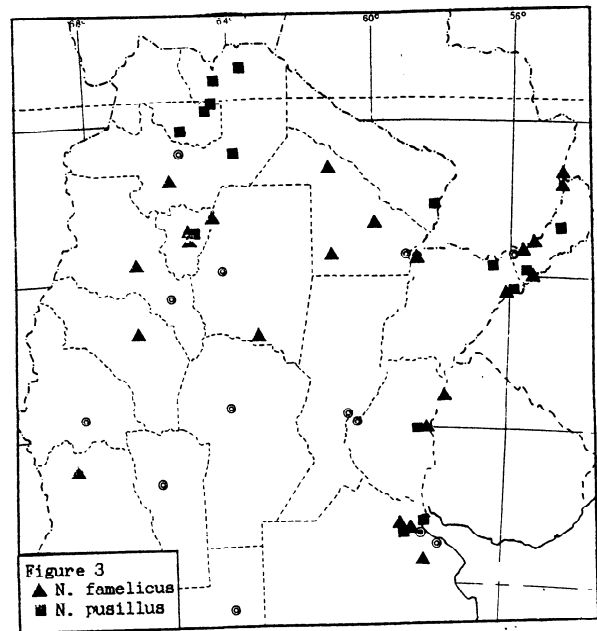
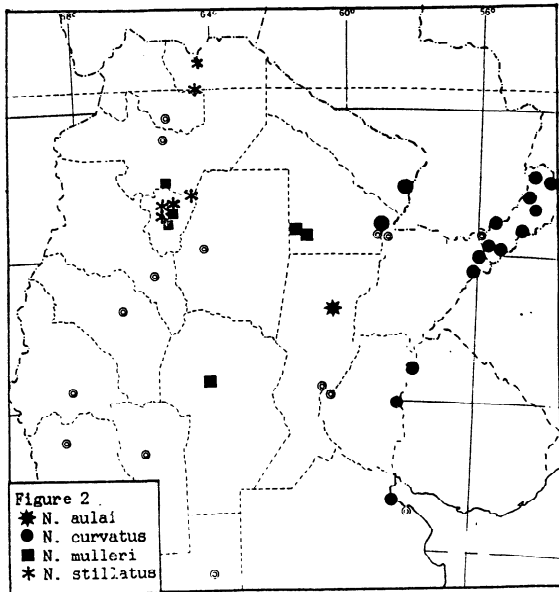
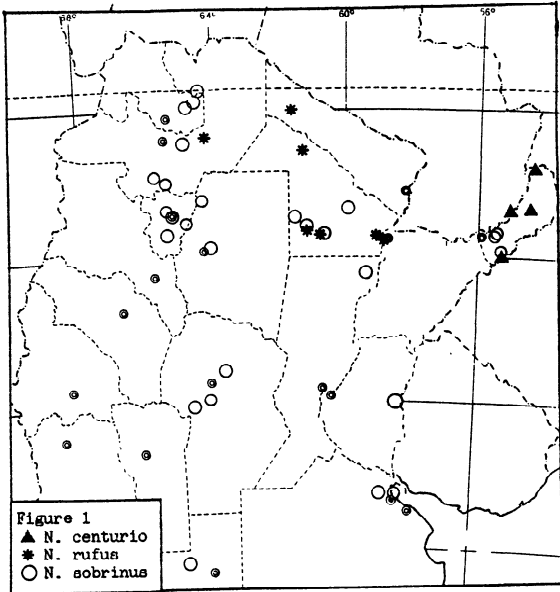
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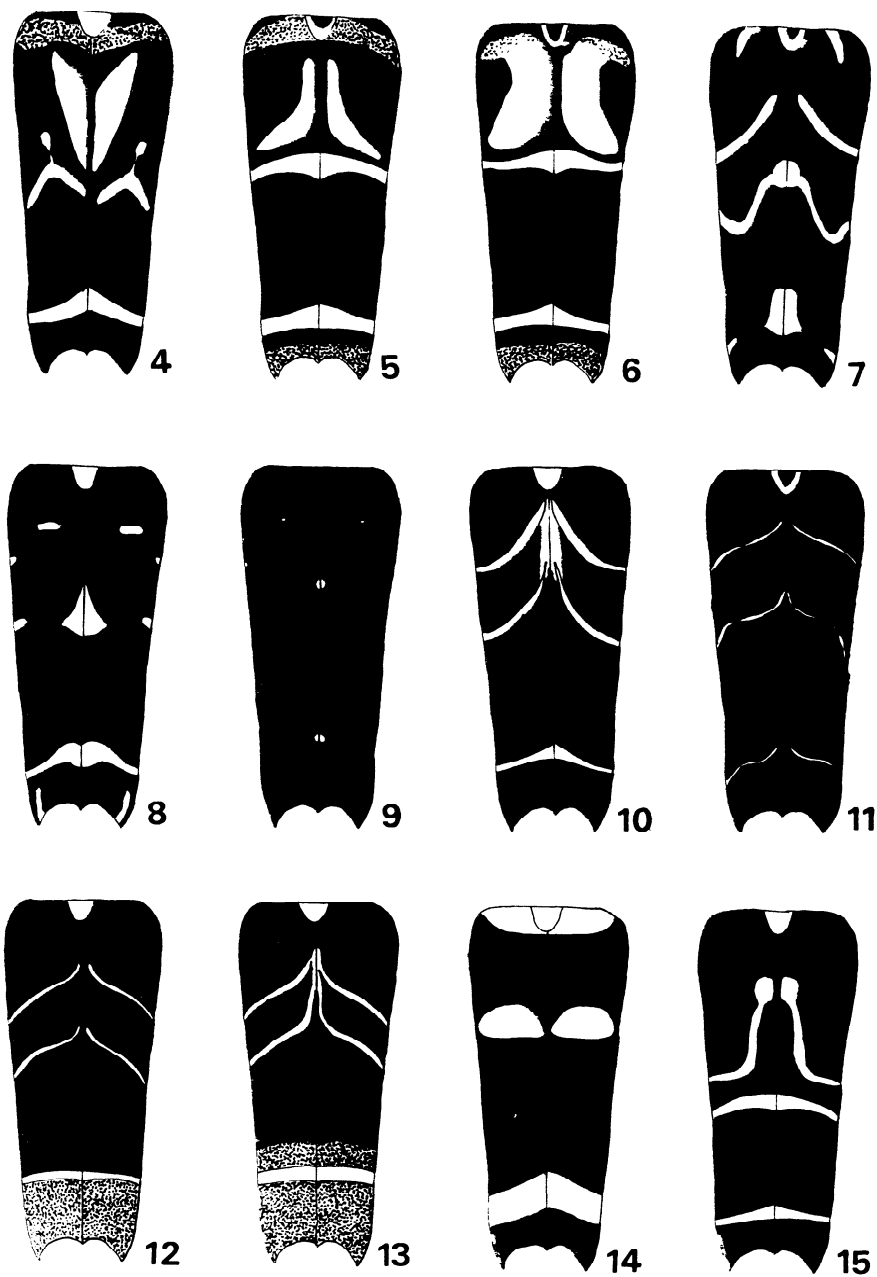
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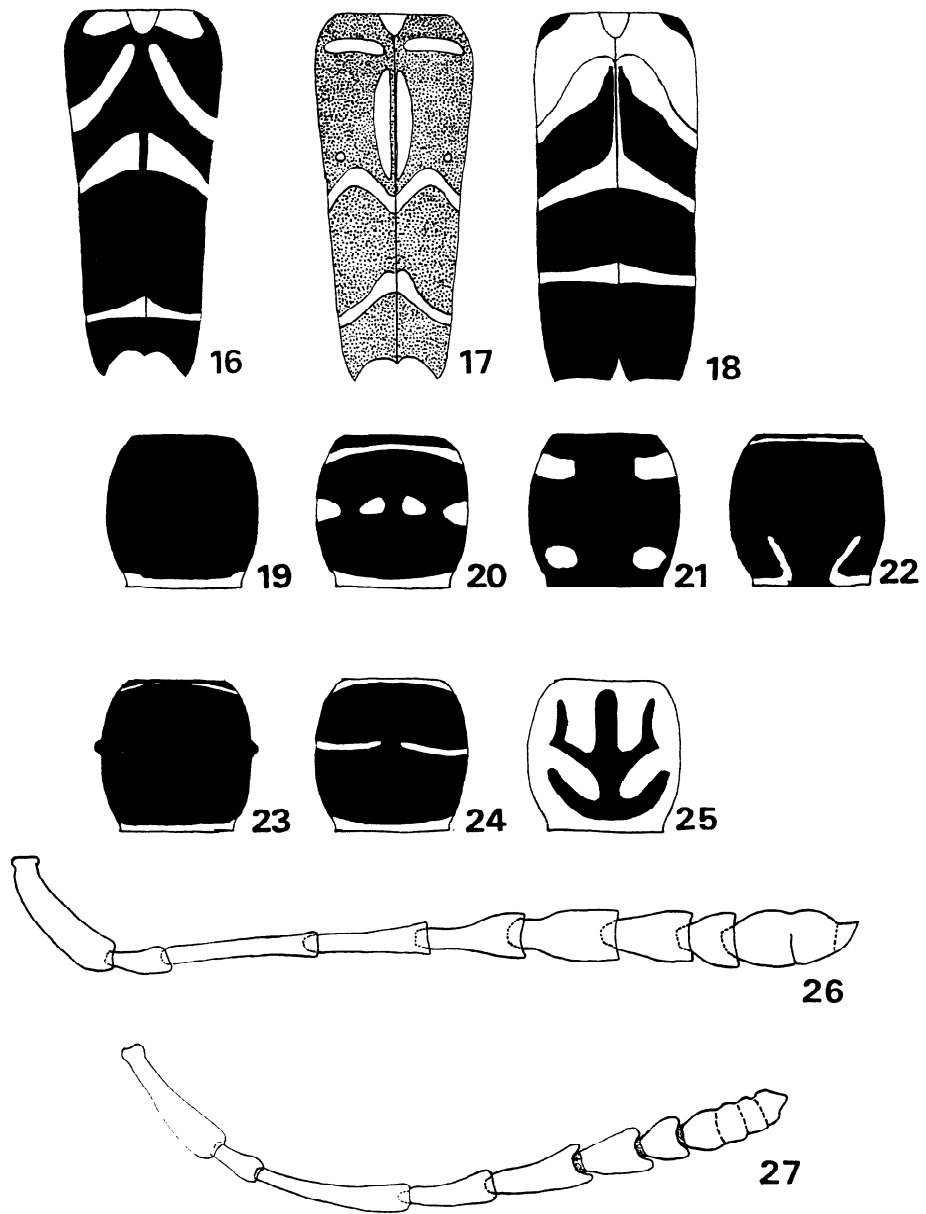
(1) In several publications (Bruch, 1912; Zajciw and Ruffinelli, 1962, and others), the species by Laporte and Gory were attributed to 1835, as their publishing date. According to Blackwelder (1943), only the volume 1 of "Histoire Naturelle et Iconographie des Insectes Coleopteres" was written by Laporte and Gory in 1835, the same as "Monographie du Genre *Clytus*." In the work, of which I have an original, the title of the preface is "Rapport fait a l'Academie Royale des Sciences, dans la séance du 4 Janvier 1836 our un travail manuscrit intitulé: Monographie du Genre *Clytus*." In the rest of the book, particularly in its cover (the real citation title), there is no mention to the publishing date, except for the coloured plates, where under the figure legends, it is written "Publié par P. Dumenil Paris 1836".



Figs. 1-3: Geographical distribution of the Argentine species of *Neoclytus*



Figs. 4-15: Elytral patterns. 4. *N. famelicus*; 5. *N. pusillus*; 6. *N. pusillus* (bis); 7. *N. curvatus*; 8. *N. stillatus*; 9. *N. stillatus* reduced pattern. (= *N. parumnotatus*); 10. *N. sobrinus*; 11. *N. armaticollis*; 12. *N. centurio* (male); 13. *N. centurio* (female); 14. *N. patagonicus*; 15. *N. delicatus*.



Figs. 16-18: Elytral patterns. 16. *N. mulleri*; 17. *N. rufus*; 18. *N. aulai*. **Figs. 19-25:** Pronotal patterns. 19. *N. pusillus*; 20. *N. curvatus*; 21. *N. stillatus*; 22. *N. sobrinus*; 23. *N. armaticollis*; 24. *N. mulleri-N. delicatus*; 25. *N. aulai*; **Figs. 26-27:** Antennae. 26. *N. mulleri*; 27. *N. delicatus*.

