

DISTRIBUTIONAL PATTERNS OF THE SOUTH AMERICAN ATERPINI (COLEOPTERA: CURCULIONIDAE)

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ABSTRACT. The 23 species of South American Aterpini, belonging to the genera *Aegorhinus* Erichson, *Alastoropolus* Kuschel, and *Micropolus* Kuschel, are distributed in four areas of endemism, namely, Central Chile, Maule, the Valdivian forest, and the Magellanic forest. Distributional patterns of these species follow two generalized tracks: one connecting Central Chile and Maule, and the other connecting Maule, the Valdivian forest, and the Magellanic forest. Due to its conflicting relationships, Maule is postulated as a node. Two alternative area cladograms are presented in order to account for its complex nature: one shows the sequence (Valdivian forest (Maule, Central Chile)), whereas the second shows the sequence (Magellanic forest (Maule, Valdivian forest)). These patterns are similar to those found in the Rhytirrhinini, although Aterpini are absent from the Magellanic moorland and the Falkland Islands.

RESUMEN. Patrones de distribución de los Aterpini sudamericanos (Coleoptera: Curculionidae). Las 23 especies sudamericanas de Aterpini, pertenecientes a los géneros *Aegorhinus* Erichson, *Alastoropolus* Kuschel y *Micropolus* Kuschel, se distribuyen en cuatro áreas de endemismo: Chile Central, Maule, selva Valdiviana y selva Magallánica. Los patrones de distribución de estas especies siguen dos trazos generalizados: uno conecta Chile Central y el Maule, mientras que el otro conecta el Maule, la selva Valdiviana y la selva Magallánica. Debido a sus relaciones conflictivas, se postula que el Maule es un nodo. Se presentan dos cladogramas de áreas alternativos para explicar su naturaleza compleja: uno muestra la secuencia (selva Valdiviana (Maule, Chile Central)), mientras que el segundo muestra la secuencia (selva Magallánica (Maule, selva Valdiviana)). Estos patrones son similares a los hallados en Rhytirrhinini, aunque los Aterpini están ausentes en el páramo Magallánico y las Islas Malvinas.

INTRODUCTION

Aterpini (Coleoptera: Curculionidae) are distributed in Australia, New Zealand, and southern South America, areas included in the Austral region (Kuschel, 1964). South American species of this tribe have been assigned to *Aegorhinus* Erichson (21 species), and the monotypic genera *Alastoropolus* Kuschel and *Micropolus* Kuschel (Morrone & Roig Juárez, 1995). The majority of these species are endemic to the Subantarctic biogeographic province, which extends along the southern Andes from 37° south latitude to the Cabo de Hornos, including the archipelago of southern Chile, Tierra del Fuego, South Georgia, and the Falkland Islands (Morrone *et al.*, 1994;

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Morrone, 1994b). The remaining species are widespread in both the Subantarctic and Central Chilean provinces, or endemic to the latter.

This paper is part of ongoing studies dealing with distributional patterns of Subantarctic weevils (Morrone, 1992, 1993, 1994a, b). My objective is to analyze the distributional patterns of the South American species of Aterpini.

MATERIAL AND METHODS

Specimens from the following collections were examined: Instituto Argentino de Investigaciones de las Zonas Áridas, Mendoza, Argentina (IADIZA); Museo Argentino de Ciencias Naturales «Bernardino Rivadavia», Buenos Aires, Argentina (MACN); Museo Nacional de Historia Natural, Santiago, Chile (MHNS); and Museo de La Plata, La Plata, Argentina (MLP). (See the appendix for a list of the specimens examined.) Other distributional data were obtained from the literature (Marshall, 1946; Kuschel, 1952a, b; Cekalovic, 1970; Elgueta, 1974). A checklist of the species analyzed is found in Morrone & Roig Juárez (1995).

Ranges of all the species were mapped (Figs. 1-7) and compared with four areas of endemism from southern South America (Fig. 8; Morrone *et al.*, 1994; Morrone, 1994b): Central Chile (CENT), Maule (MAUL), Valdivian forest (VALD), and Magellanic forest (MAGE). A panbiogeographic analysis led to identification of two generalized tracks, and two alternative area cladograms were proposed. For details on historical biogeographic methods see Morrone & Crisci (1995).

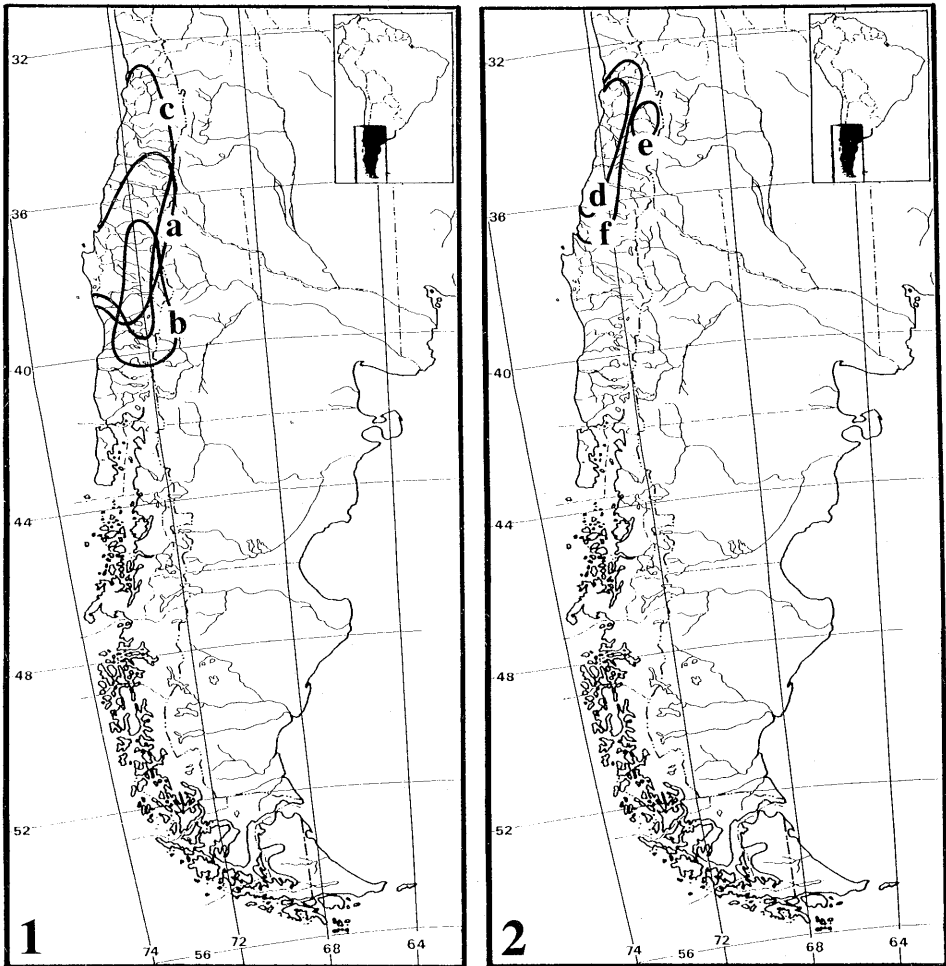
Table I. Geographical distribution of the South American Aterpini. + = present.

Species	Central Chile	Maule	Valdivian forest	Magellanic forest
<i>Aegorhinus albolineatus</i>	+	+		
<i>A. boviei</i>	+	+		
<i>A. bulbifer</i>		+	+	
<i>A. fascicularis</i>			+	
<i>A. inermis</i>		+		
<i>A. kuscheli</i>			+	
<i>A. maestus</i>			+	
<i>A. nitens</i>		+		
<i>A. nodipennis</i>		+	+	
<i>A. ochreolus</i>		+	+	
<i>A. oculatus</i>		+	+	
<i>A. opaculus</i>			+	
<i>A. phaleratus</i>	+	+		
<i>A. schoenherri</i>	+	+		
<i>A. servillei</i>		+	+	
<i>A. silvicola</i>		+		
<i>A. subplanifrons</i>	+			
<i>A. superciliosus</i>		+	+	
<i>A. suturalis</i>		+		
<i>A. vitulus</i>				+
<i>Alastoropolus strumosus</i>		+	+	+
<i>Micropolus delfini</i>		+		+

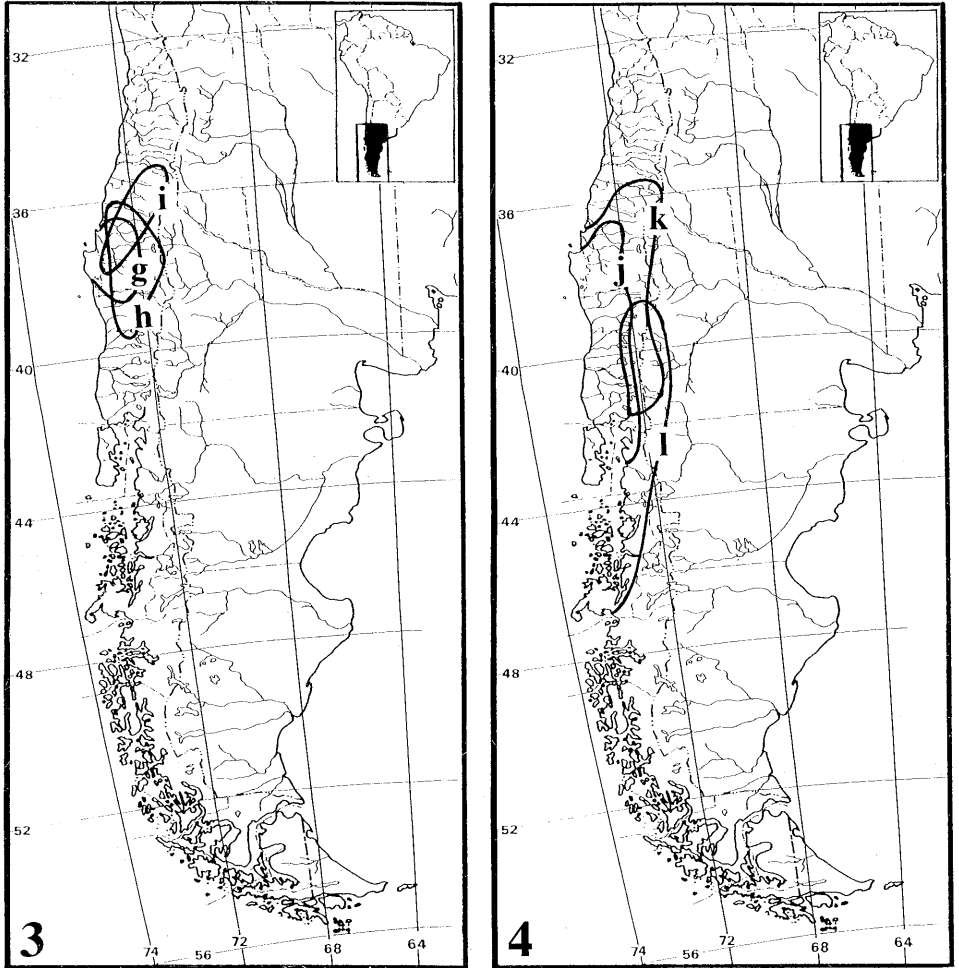
RESULTS

Endemic species. Ten species (45%) are endemic to some of the areas of endemism analyzed (Table I). *Aegorhinus subplanifrons* (Fig. 2) is the only species endemic to Central Chile. *Aegorhinus silvicola* (Fig. 1), *A. inermis*, *A. nitens*, and *A. suturalis* (Fig. 3) are endemic to Maule. *Aegorhinus fascicularis*, *A. kuscheli*, *A. maestus*, and *A. opaculus* (Fig. 6) are endemic to the Valdivian forest. *Aegorhinus vitulus* (Fig. 6) is the only species endemic to the Magellanic forest.

Widespread species. The remaining 12 species are widespread in two or three of the four areas analyzed (Table I). *Aegorhinus albolineatus*, *A. schoenherri* (Fig. 1), *A. boviei*, and *A. phaleratus* (Fig. 2) are distributed in Central Chile and Maule. *Aegorhinus servillei*, *A. oculatus*, *A. superciliosus* (Fig. 4), *A. bulbifer*, *A. nodipennis*, and *A. ochreolus* (Fig. 5) are distributed in Maule and the Valdivian forest. The only species of



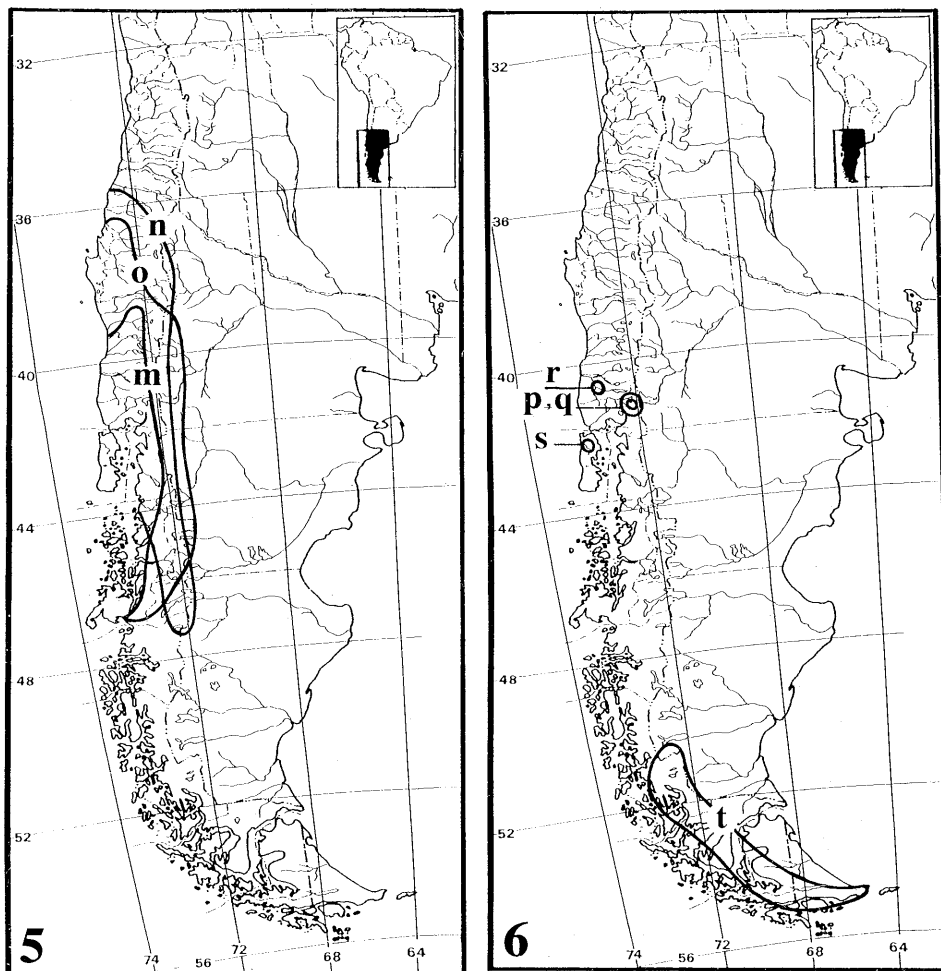
Figs. 1, 2. Geographical distribution of the South American Aterpini. a = *Aegorhinus albolineatus*; b = *A. silvicola*; c = *A. schoenherri*; d = *A. phaleratus*; e = *A. subplanifrons*; f = *A. boviei*.



Figs. 3, 4. Geographical distribution of the South American Aterpini. g = *Aegorhinus suturalis*; h = *A. inermis*; i = *A. nitens*; j = *A. servillei*; k = *A. superciliosus*; l = *A. oculatus*.

Alastoropolus and *Micropolus*, respectively, *A. strumosus* and *M. delfini* (Fig. 7), have disjunct distributions. The former is distributed in the Valdivian forest, Maule, and the Magellanic forest, whereas the latter occurs in Maule and the Magellanic forest.

Generalized tracks. The widespread species can be ordered into two generalized tracks (Fig. 9): (1) Central Chile-Maule («A» in figure 9): based on *Aegorhinus albolineatus*, *A. boviei*, *A. phaleratus*, and *A. schoenherri*; and (2) Maule-Valdivian forest-Magellanic forest («B» plus «C» in figure 9): based on *Aegorhinus bulbifer*, *A. nodipennis*, *A. ochreolus*, *A. oculatus*, *A. servillei*, *A. superciliosus*, *Alastoropolus strumosus*, and *Micropolus delfini*. Maule is identified as a node (= complex area), where both generalized tracks overlap.

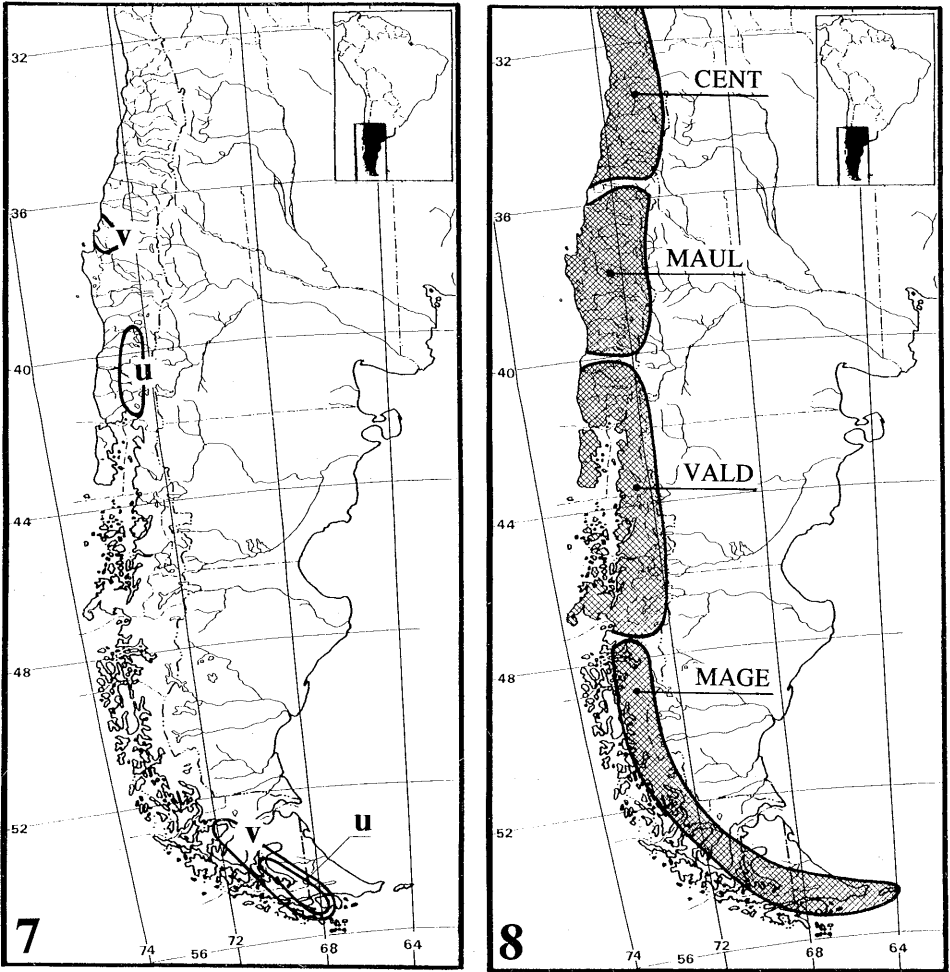


Figs. 5, 6. Geographical distribution of the South American Aterpini. m = *Aegorhinus ochreolus*; n = *A. nodipennis*; o = *A. bulbifer*; p = *A. fascicularis*; q = *A. opaculus*; r = *A. maestus*; s = *A. kuscheli*; t = *A. vitulus*.

Area cladograms. Two area cladograms are proposed (Fig. 9). The incongruence between these area cladograms is hypothesized herein to account for the complex nature of Maule.

DISCUSSION

Fifteen genera of Andean Rhytirrhini are present in the Subantarctic and Central Chilean provinces (Morrone, 1994b; Morrone & Anderson, 1995; Morrone & Roig Juárez, 1995). Eight genera (*Philippius* Germain, *Antarctobius* Fairmaire, *Falklandiellus* Kuschel, *Telurus* Kuschel, *Lanteriella* Morrone, *Falklandius* Enderlein, *Falklandiopsis* Morrone & Anderson, and *Haversiella* Schweiger) are endemic to the Subantarctic,



Figs. 7, 8. Geographical distribution of the South American Aterpini. u = *Alastoropolus strumosus*; v = *Micropolus delfini*. CENT = Central Chile; MAGE = Magellanic forest; MAUL = Maule; VALD = Valdivian forest.

whereas seven (*Trachodema* Blanchard, *Lamiarhinus* Morrone, *Germainiellus* Morrone, *Hyperoides* Marshall, *Adioristidius* Voss, *Puranus* Germain, and *Neopachytychius* Hustache) are widespread in both the Subantarctic and Central Chile. The high degree of endemism and sympatry of the Rhytirrhinini in Central and southern Chile is similar to that reported herein for the Aterpini. It has been hypothesized previously that this endemism and sympatry reflect ancient processes of isolation and diversification, followed by dispersion (Elgueta, 1988; Morrone, 1993).

Aterpini are absent from the Magellanic moorland and the Falkland Islands, where species of Rhytirrhinini are well-represented (Morrone, 1992, 1993, 1994a; Morrone & Anderson, 1995). This is probably due to the fact that the species of *Nothofagus*, which include the most important host plants of Aterpini (Gentili & Gentili, 1988; Morrone & Roig Juñent, 1995) are scattered in the former area and completely absent from the latter. It has been suggested that the biota of the Falkland Islands

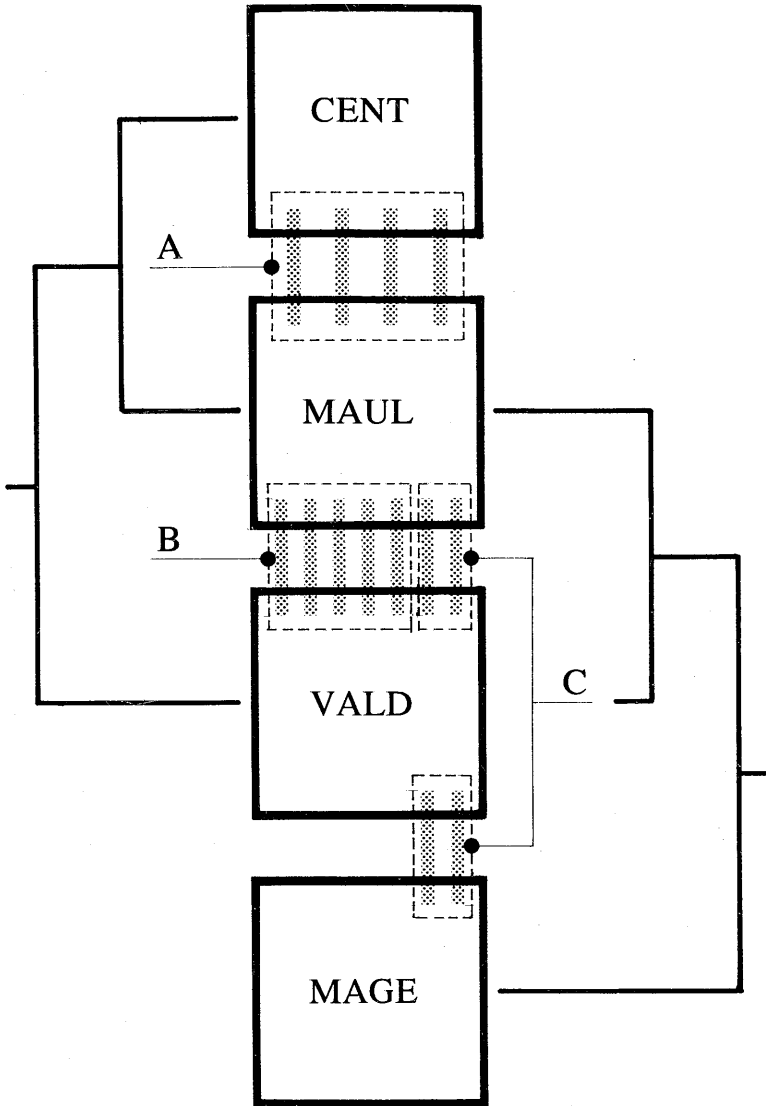


Fig. 9. Individual and generalized tracks of the South American Aterpini, with two alternative area cladograms. CENT = Central Chile; MAGE = Magellanic forest; MAUL = Maule; VALD = Valdivian forest.

may have become depauperate when forest species could not tolerate cooler conditions associated with oceanic islands (Rothkuegel, 1916; Morrone *et al.*, 1994). In a global analysis of the Andean Rhytirrhini (Morrone, 1994b) I assumed the existence of a former widespread Austral biota, with Paramo, Patagonian, and Punan provinces representing three portions successively isolated, and the Subantarctic and Central Chilean provinces representing its less depauperate remnants. Exclusive presence of Aterpini in the Subantarctic and Central Chilean provinces would indicate either that

they represent a more recent group, or that the Paramo, Patagonian, and Punan provinces do not have the proper host plants to support them.

As a result of this analysis, Maule was identified as a complex area. A cladistic biogeographic analysis of *Aegorhinus*, based on its taxon-area cladogram, will allow elucidation of the relationships of Maule with the other areas. Furthermore, analyses of other taxa will assess the general validity of the patterns analyzed.

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APPENDIX. Material examined

Aegorhinus albolineatus (Blanchard). **CHILE. Arauco:** Pemehue, 1894, P. Germain coll., 3 (MHNS); Pillimpilli, I-1954, L. E. Peña coll., 1 (MHNS). **Bío-Bío:** Los Angeles, I-1928, 2 (MHNS). **Cachapoal:** Rengo, II-1991, 5 (MLP). **Cautín:** Cherquenco, I-1954, L. E. Peña coll., 1 (MHNS). **Linares:** Estero Leiva, X-1950, 1 (MHNS), X-1953, 2 (MHNS), XI-1953, L. E. Peña coll., 9 (MHNS). **Ñuble:** Cordillera de Chillán, 1899, P. Germain coll., 6 (MHNS); Las Trancas, 6-III-1984, J. E. Barriga coll., 1 (MLP); Recinto, I-1953, L. E. Peña coll., 2 (MHNS); San Fabián, 25-III-1976, J. E. Barriga coll., 5 (MACN), 27-XII-1976, J. E. Barriga coll., 1 (MACN). **Talca:** Altos de Vilches, 1280 m, 22/24-II-1971, J. Solervicens coll., 1 (MHNS), 20-I-1984, J. E. Barriga coll., 4 (MLP), 27-XII-1987, J. E. Barriga coll., 4 (MLP), I-1990, G. Pérez de Arce coll., 5 (MHNS).

Aegorhinus boviei (Desbrochers). **CHILE. Quillota:** Cerro La Campana, Limache, 10-XII-1970, J. Solervicens coll., 1 (MHNS); Granizo, II-1966, 1 (MHNS). **Talca:** Constitución, 1 (MHNS). **Valparaíso:** Peñuelas, 28-XII-1970, 1 (MHNS); Quilpué, I-1967, J. Moroni coll., 1 (MHNS); Quintay, 3-IX-1990, T. Fichet coll., 1 (MHNS); Valparaíso, R. Reed coll., 1 (MHNS).

Aegorhinus bulbifer Kuschel. **ARGENTINA. Chubut:** without precise data, 1 (MLP). **Neuquén:** Chapelco, 7-III-1964, 1 (MLP); Huechulafquén, I-1984, F. Roig coll., 2 (IADIZA); Lago Epulafquen, 12-XII-1959, S. Schajovskoi coll., 1 (MLP); Lago Queñi, 760 m, 2-XII-1985, S. Roig Juñent coll., 1 (IADIZA); P. N. Lanín, Lago Hermoso, X-1949, S. Schajovskoi coll., 2 (MLP); P. N. Nahuel Huapi, I-1950, Ferraris coll., 4 (MLP), XII-1959, Orfila coll., 1 (MACN), 6 (MLP); Pucará, XII-1951, S. Schajovskoi coll., 1 (MLP); Villa La Angostura, F. Roig coll., 1 (IADIZA). **Río Negro:** P. N. Nahuel Huapi, Isla Victoria, IV-1958, 1 (IADIZA), XII-1959, Orfila coll., 1 (MACN). **CHILE. Aisén:** Coihaique, I-1934, 2 (MHNS); Puerto Aisén, I-1934, 1 (MHNS); Taitao, Base 4, fiordo Puelma con estuario B. Arana, 19-XI-1953, C. Rittart coll., 1 (MHNS). **Arauco:** Caramavida, 31-XII-1953, L. E. Peña coll., 4 (MHNS); Pillimpilli, I-1954, L. E. Peña coll., 3 (MHNS). **Llanquihue:** Lago Chapo, XI-1952, 21 (MHNS), II-1953, L. E. Peña coll., 16 (MHNS); Puerto Montt, 12-II-1971, 2 (MHNS). **Malleco:** Manzanar, 26-XI-1979, 1 (MLP); P. N. Nahuel Buta, 1200 m, 23-XII-1985, S. Roig Juñent coll., 2 (IADIZA). **Ñuble:** Cobquecura, I-1954, L. E. Peña coll., 13 (MHNS). **Palena:** Santa Bárbara, 25 km N Chaitén, 14-I-1988, J. J. Morrone coll., 1 (MLP); Termas del río Amarillo, 16-I-1988, J. J. Morrone coll., 1 (MLP).

Aegorhinus inermis Kuschel. **CHILE. Ñuble:** Cobquecura: 10-I-1983, P. Ramírez coll., 2 (MHNS).

Aegorhinus kuscheli Elgueta. **CHILE. Chiloé:** Dalcahue, 7-II-1979, M. Elgueta coll., 1 (MHNS), 8/11-II-1979, M. Elgueta coll., 1 (MHNS), II-1981, G. Barría coll., 1 (MHNS).

Aegorhinus nitens Kuschel. **CHILE. Curicó:** Potrero Grande, I-1980, 6 (MLP).

Aegorhinus nodipennis (Hope). **ARGENTINA. Neuquén:** Lago Queñi, 760 m, 2-XII-1985, S. Roig Juñent coll., 2 (IADIZA); Hua-Hum, 800 m, 15-XI-1948, S. Schajovskoi coll., 2 (MLP); Lago Pulmarí, II-1981, I. L. Gallardo coll., 1 (MACN); Pucará, P. N. Lanín, S. Schajovskoi coll., 1 (MLP); Río Huemul, 27-II-1970, 1 (MLP);

San Martín de los Andes, 4-III-1942, M. Birabén coll., 1 (MLP), 7-V-1964, 1 (IADIZA); without precise data, 5 (MLP). **Río Negro:** Bariloche, I-1942, Rossi coll., 1 (MACN), I-1950, Ferraris coll., 1 (MLP); Isla Victoria, 15-XII-1969, 1 (MLP); P. N. Nahuel Huapi, Isla Victoria, I-1949, Ferraris coll., 4 (MLP), XI-1954, Orfila coll., 5 (MACN), XII-1959, Orfila coll., 1 (MACN), X-1960, 3 (IADIZA); P. N. Nahuel Huapi, Lago Frías, I-1947, J. Navas coll., 1 (MLP). **CHILE. Arauco:** Caramavida, 6-I-1953, L. E. Peña coll., 2 (MHNS); Pemehue, 1894, P. Germain coll., 14 (MHNS), I-1896, 3 (MHNS), 1 (MHNS). **Aisén:** Coihaique, I-1934, 2 (MHNS). **Bío-Bío:** Angol, 27-VI-1949, Cuevas coll., 1 (MHNS), 5-X-1949, Raimao coll., 1 (MHNS), 27-XI-1949, Cuevas coll., 1 (MHNS), 6-X-1951, F. Escauriaza coll., 3 (MHNS), 18-III-1952, 2 (MHNS). **Cautín:** Cherquenco, I-1954, L. E. Peña coll., 5 (MHNS); Villarica, El Coique, II-1979, 1 (MLP). **Linares:** Estero Leiva, X-1953, L. E. Peña coll., 6 (MHNS), I-1954, L. E. Peña coll., 3 (MHNS). **Llanquihue:** Frutillar, I-1991, E. Maury coll., 1 (MLP). **Malleco:** Curacautín, 1 (MHNS); Lago Icalma, I-1962, Valencia coll., 1 (MACN); Manzanar, 26-XI-1979, 1 (MLP); P. N. Contulmo, 19-IX-1975, 3 (MLP); P. N. Nahuel Buta, 1200 m, 23-XII-1985, S. Roig Juñent coll., 1 (IADIZA). **Ñuble:** Cobquecura, I-1954, L. E. Peña coll., 6 (MHNS); cordillera de Chillán, 1899, P. Germain coll., 2 (MHNS); Quirihue, II-1977, 2 (MLP); Recinto, XI-1953, L. E. Peña coll., 2 (MHNS); San Fabián, 20-I-1976, J. E. Barriga coll., 2 (MACN). **Osorno:** Puyehue, 10-II-1979, 1 (MLP). **Talca:** Constitución, Reiche coll., 2 (MHNS); Pulluhue, 18/20-IX-1985, F. Silva coll., 2 (MHNS). **Valdivia:** Lanco, I-1980, 2 (MLP); La Unión, 6-III-1952, 3 (MHNS); Panguipulli, 1927, 1 (MHNS); Valdivia, 2 (MHNS).

Aegorhinus ochreolus Kuschel. **CHILE. Aisén:** península de Taitao, 1 (MHNS). **Cautín:** Temuco, I-1975, S. Roig Juñent coll., 1 (MLP). **Chiloé:** Quellón, I-1955, J. Vargas coll., 3 (MHNS). **Palena:** Santa Bárbara, 25 km N Chaitén, 14-I-1988, J. J. Morrone coll., 1 (MLP).

Aegorhinus oculatus Kuschel. **ARGENTINA. Neuquén:** Chacayal, S. Schajovskoi coll., 1 (MLP); Chapelco, 1700 m, 19-I-1950, S. Schajovskoi coll., 1 (MACN); Pucará, P. N. Lanín, S. Schajovskoi coll., 1 (MLP). **Río Negro:** Cerro López, 1500 m, 9-II-1968, L. & C. W. O' Brien coll., 1 (MHNS). **CHILE. Cautín:** Cherquenco, I-1954, L. E. Peña coll., 2 (MHNS); volcán Llaima, 16-I-1972, D. Lanfranco coll., 1 (MHNS).

Aegorhinus opaculus (Desbrochers). **CHILE. Chiloé:** without precise data, 5 (MHNS). **Llanquihue:** Lago Chapo, XI-1952, 1 (MHNS).

Aegorhinus phaleratus Erichson. **CHILE. Quillota:** Va. Quillota, 23-II-1961, J. Valencia coll., 1 (MACN). **Santiago:** Santiago, 1914, Porter coll., 2 (MACN), 1929, F. Ruiz coll., 1 (MLP), XII-1987, J. E. Barriga coll., 2 (MACN).

Aegorhinus schoenherri (Gay & Solier). **CHILE. Arauco:** Cerros de Nahuel Buta, 3-XII-1949, D. S. Bullock coll., 3 (MHNS); Pemehue, 1894, P. Germain coll., 13 (MHNS). **Bío-Bío:** Angol, 18-III-1952, 1 (MHNS). **Cautín:** Cherquenco, I-1954, 1 (MHNS). **Colchagua:** Valle del Nilahue, II-1915, 1 (MHNS). **Concepción:** Concepción, 3 (MHNS). **Curicó:** Los Queñes, II-1949, 2 (MHNS), 15-I-1984, S. Roig Juñent coll., 1 (MLP); Potrero Grande, 23-X-1976, G. Arriagada coll., 1 (MHNS). **Linares:** Estero Leiva, X-1953, 1 (MHNS). **Malleco:** Lonquimay, 1 (MHNS); P. N. Nahuel Buta, 1200 m, 23-XII-1985, S. Roig Juñent coll., 4 (IADIZA). **Osorno:** Llollehue, 1 (MHNS). **Valdivia:** Valdivia, 2 (MHNS).

Aegorhinus servillei (Gay & Solier). **CHILE. Arauco:** Alto Caicupil, 8-I-1954, L. E. Peña coll., 3 (MHNS); Pemehue, 1894, P. Germain coll., 4 (MHNS), I-1896, P. Germain coll., 1 (MHNS); Pichinahuel, I-II-1953, L. E. Peña coll., 7 (MHNS). **Chiloé:** without precise data, 1 (MHNS). **Llanquihue:** Frutillar, 5-XII-1985, S. Roig-Juñent coll., 1 (IADIZA). **Ñuble:** San Ignacio, I-1894, 1 (MHNS). **Osorno:** Pichil, I-1965, J. Moroni coll., 2 (MHNS). **Valdivia:** Riñihue, 1 (MHNS); Santa Elisa, 450 m, 18-I-1990, J. J. Morrone coll., 1 (MLP).

Aegorhinus silvicola Kuschel. **ARGENTINA.** Neuquén: Estación Forestal Pucará, 21-XII-1965, Grosso coll., 1 (MLP); Lago Queñi, 760 m, 2-XII-1987, S. Roig Juñent coll., 2 (IADIZA). **CHILE.** Malleco: Manzanar, 26-XI-1979, 1 (MLP); Río Blancó, 24-I-1974, L. E. Peña coll., 1 (MHNS). Ñuble: Cordillera de Chillán, Las Trancas, 14/21-I-1971, Ocare coll., 1 (MHNS), 16-I-1987, J. E. Barriga coll., 1 (MACN).

Aegorhinus superciliosus (Guérin). **ARGENTINA.** Río Negro: Bariloche, I-1950, Ferraris coll., 2 (MLP); P. N. Nahuel Huapi, 3 (MACN). **CHILE.** Arauco: Contulmo, 12-I-1989, E. Maury coll., 1 (MLP); Curanilahue, 1-1972, 4 (MLP). Bío-Bío: Angol, 10-VI-1949, R. Cuevas coll., 1 (MHNS), 30-XI-1949, Wouzman coll., 1 (MHNS), 21-XI-1949, Cerda coll., 2 (MHNS), 11-XII-1949, Frinot coll., 1 (MHNS), 11-XII-1949, Sielfeld coll., 1 (MHNS), 12-XII-1949, W. Guzmán coll., 1 (MHNS), 21-XI-1951, M. Nerco coll., 1 (MHNS), 24-XI-1951, J. Suárez coll., 1 (MHNS), 18-III-1952, 3 (MHNS). Cautín: Cherquenco, I-1954, L. E. Peña coll., 3 (MHNS); Pucón, III-1969, T. Ramírez coll., 4 (MHNS), I-1975, S. Roig Juñent coll., 4 (MLP), XII-1985, S. Roig Juñent coll., 6 (MLP); Temuco, 1-1975, S. Roig Juñent coll., 1 (MLP). Concepción: Concepción, M. Crozat coll., 7 (MHNS), 2 (MLP). Curicó: Los Queñes, 15-I-1984, S. Roig Juñent coll., 1 (MLP). Llanquihue: Frutillar, I-II-1956, G. Kuschel coll., 1 (MHNS), 5-XII-1985, 2 (IADIZA). Malleco: P. N. Nahuel Buta, 3-XII-1949, S. Bullock coll., 3 (MHNS), 1-II-1979, 2 (MLP); Curacautín, 13-III-1952, 1 (MHNS); Termas del río Blanco, IV-1988, J. E. Barriga coll., 3 (MACN); Victoria, 3-XII-1979, 4 (MLP), III-1989, 2 (MLP). Ñuble: Chillán, 1 (MHNS); Pte. Marchant, 9-XII-1989, J. E. Barriga coll., 6 (MACN). Osorno: Osorno, I-1975, S. Roig Juñent coll., 5 (MLP), XII-1984, S. Roig Juñent coll., 10 (MLP). Talca: 1870, Philippii coll., 1 (MHNS). Valdivia: Lanco, 1-1980, 6 (MLP); Valdivia, 110 (MHNS).

Aegorhinus suturalis (Blanchard). **CHILE.** Arauco: Alto Caicupil, 1000 m, 12-I-1954, L. E. Peña coll., 1 (MHNS); Contulmo, 12-I-1989, E. Maury coll., 1 (MLP); Pemehue, IX-XII-1896, 1 (MHNS). Bío-Bío: Angol, cerros de Nahuel Buta, 3-XII-1984, S. Bullock coll., 1 (MHNS). Cautín: Cherquenco, II-1954, L. E. Peña coll., 2 (MHNS); Lautaro, 1 (MHNS). Concepción: Concepción, II-1924, 3 (MHNS). Linares: Estero Leiva, X-1953, L. E. Peña coll., 8 (MHNS). Ñuble: Cordillera de Chillán, 1899, P. Germain coll., 6 (MHNS).

Aegorhinus vitulus (Fabricius). **ARGENTINA.** Tierra del Fuego: Bahía Tethys, 20-II-1951, B. Torres coll., 4 (MLP); Lago Fagnano, on *Nothofagus* sp., I-1939, 1 (MLP). **CHILE.** Aisén: without precise data, II-1934, Pirión coll., 1 (MHNS). Llanquihue: Puerto Montt, 1 (MLP). Magallanes: Cerro León, 19-I-1969, V. Pérez coll., 3 (MHNS); Isla Virtudes, XII-1977, F. Roig coll., 1 (IADIZA); Laguna El Parrillar, 450 m, 2-II-1990, J. J. Morrone coll., 1 (MLP); Punta Arenas, La Turba, 27-XII-1950, 7 (MHNS); Quinta Fittet, 8-X-1953, 3 (MHNS). Ultima Esperanza: Cancha Carreras, 24-I-1988, J. J. Morrone coll., 1 (MLP); Ultima Esperanza, I-1977, F. Roig coll., 1 (IADIZA).

Alastoropolus strumosus (Olivier). **ARGENTINA.** Tierra del Fuego: without precise data, C. Bruch coll., 2 (MACN). **CHILE.** Llanquihue: Puerto Montt, 15-II-1971, 2 (MHNS).

Micropolus delfini (Germain). **ARGENTINA.** Tierra del Fuego: Ushuaia, Valle Andorra, 18-XI-1984, A. P. Sobral coll., 1 (MLP).