



Insects found in birds' nests from Argentina: *Anumbius annumbi* (Vieillot, 1817) (Aves: Furnariidae)

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Abstract

Insects found in the nests of *Anumbius annumbi* (Vieillot) [Aves: Furnariidae] from the provinces of Buenos Aires, Santa Fe, Entre Ríos, and La Pampa (Argentina) were studied. A total of 20 nests was sampled every 21 days in Buenos Aires, together with the insects found under ritidome of *Eucalyptus* in the same area. Samples from nests were divided by seasons: end of summer [nest 1]; autumn [nests 2 to 6]; winter [nests 7 to 12]; spring [nests 13 to 16]; summer [nests 17 to 19], and beginning of autumn [nest 20]. A total of 92 species of insects was found, of which only 36 species had been previously reported in the literature from 1943 until 2005. Additional nests were sampled from Santa Fe (3 nests), Entre Ríos (1 nest), and La Pampa (4 nests). Species richness, abundance and diversity per nest are given and discussed. Insects in birds' nests are classified according to their functional guilds (predators; hematophages and parasitoids; detritivores; phytophages and fungivorous); degree of permanence in the nests (temporal inhabitants [hibernants]; permanent inhabitants; accidentals and/or occasionals). Mortality among the insect fauna inside the nests and other dead insects found inside nests, probably prey remains, are cited. The insect fauna under the ritidome of *Eucalyptus* permits establishment of a habitat gradient: species only found in the nests, species mainly found in the nests and rarely under the ritidome, species found both under the ritidome and in the nests, species mainly found under ritidome and seldom in the nests, and species only found under the ritidome. Comments and remarks are made on selected taxa lacking or with limited biological data. The microhabitat in the tunnels of *Ctenomys* [Rodentia] is compared with the birds' nests regarding its similar insect fauna. Inquiline birds and mammals are also mentioned.

Key words: Insects, nests, *Anumbius annumbi*, Argentina

Resumen

Se estudiaron los insectos encontrados en los nidos de *Anumbius annumbi* (Vieillot, 1817) [Aves: Furnariidae] de las provincias de Buenos Aires, Santa Fe, Entre Ríos y La Pampa (Argentina). En Buenos Aires se muestrearon cada 21 días un total de 20 nidos, conjuntamente con los insectos encontrados debajo del ritidoma de árboles de *Eucalyptus* en la misma localidad. Los muestreos fueron agrupados de acuerdo a las estaciones del Hemisferio Sur: final del verano [nido 1]; otoño [nidos 2 a 6]; invierno [nidos 7 a 12]; primavera [nidos 13 a 16]; verano [nidos 17 a 19], y comienzo del otoño [nido 20]. De los nidos se obtuvieron un total de 92 especies de insectos, de los cuales solo 36 especies habían sido previamente mencionadas en la literatura desde 1943 hasta 2005. Se muestrearon nidos adicionales en Santa Fe (3 nidos), Entre Ríos (1 nido) y La Pampa (4 nidos). Se proporcionan y se discuten la riqueza específica, abundancia y diversidad por nido y por estación. Los insectos de los nidos se clasifican de acuerdo a su gremio funcional (predadores; hematófagos y parasitoides; detritívoros; fitófagos y fungívoros), el tiempo de permanencia dentro de los nidos (habitantes temporales [hibernantes]; habitantes permanentes [nidícolas]; accidentales y/u ocasionales). Se dan en detalle la mortalidad de la fauna de insectos dentro de los nidos y otros insectos muertos encontrados también dentro de los nidos, probablemente restos de presas. La fauna de insectos bajo el ritidoma de *Eucalyptus* permite establecer un gradiente de habitat: especies que se encuentran solo en los nidos; especies encontradas mayormente en los nidos y escasamente bajo el ritidoma; especies encontradas bajo el ritidoma y en los nidos indistintamente; especies encontradas mayormente bajo el ritidoma y escasamente en los nidos; especies encontradas solo bajo el ritidoma. Se hacen comentarios de algunos taxa seleccionados con poca o sin información biológica. En vista de su fauna similar los nidos se comparan con el microhábitat de los túneles de *Ctenomys* [Rodentia]. Se mencionan también aves y mamíferos inquilinos.

Palabras clave: Insectos, nidos, *Anumbius annumbi*, Argentina

Introduction

Anumbius annumbi (Vieillot) [Aves: Furnariidae], commonly known as “leñatero” [firewood-gatherer], is distributed across Brazil, Uruguay, Paraguay, and Argentina (Fig. 1). It inhabits shrub lands, xerophilous forests, and coppices in rural areas (Barretto & Carvalheiro 1967; Salvatella *et al.* 1991; Narosky & Di Giacomo 1993). Of two sites at Partido de Magdalena (Buenos Aires), *A. annumbi* was present and abundant only in one site, which was conspicuously more open and less woody (Mason 1985). The biology of this species was