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## Three new species of Caponiid spiders from Ecuador (Araneae, Caponiidae)

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### Abstract

Three new species of Caponiidae in two different genera are described from Ecuador. *Nops cesari* n. sp., *Nops quito* n. sp. and *Nyetnops juchuy* n. sp. A key to the genera of the subfamily Nopinae is provided.

**Key words:** Spider, Nopinae, Caponiidae

### Introduction

There is only one record of the family Caponiidae in Ecuador, in 1913 Berland reported the occurrence of *Nops variabilis* Keyserling 1877 in Quito and Alausi. As such we were quite intrigued to find a juvenile female caponiid spider during a collecting trip to the house of Don César Tapia in a lowland evergreen forest in the Cotopaxi Province. Fascinated by this discovery, several additional collecting trips were made and eventually an adult male was collected. To include more specimens in the study, the spider collection at the Pontificia Universidad Católica in Quito was examined. Surprisingly, it contained a few specimens of this same new species and also specimens of two additional new species of caponiids.

The family Caponiidae includes 86 species in 15 genera, 11 of which occur in the Americas (Platnick 2014). The 70 species that occur in the New World have been well studied mainly by Platnick (1993, 1994a, 1994b, 1995), Sánchez-Ruiz (2004, 2005), Platnick & Lise (2007) and Sánchez-Ruiz *et al.* (2010).

In 1939, Petrunkevitch divided the family Caponiidae into two subfamilies, the Caponiinae and the Nopinae. The subfamily Caponiinae includes 9 genera that are found both in the Old and New World. The subfamily Nopinae is “largely tropical, extending from the southwestern United States and Greater Antilles throughout the tropical parts of South America” (Platnick 1994b) and contains 6 genera. The two subfamilies are easily distinguished: the Caponiinae have entire tarsi whereas members of the Nopinae are characterized by subsegmented tarsi (Fig. 4). Although the monophyly of the Nopinae is well accepted, that of the Caponiinae has been contested for quite some time (Platnick 1994b). All species described here belong to the subfamily Nopinae.

The genus *Nops* MacLeay 1839 is the most species rich and is widespread throughout the Caribbean and South America, but it has never been revised. The most recent taxonomic work was completed by Sánchez-Ruiz (2004, 2005, 2010) who described species from Cuba, Hispaniola and the Virgin Islands. Platnick & Lise (2007: 1) defined the genus as follows: “*Nops* MacLeay 1839 is also marked by a variety of additional, bizarre leg modifications, including the enormous elongation of the unpaired claw into a structure that reaches as far dorsally as do the paired claws (and is apparently associated with the presence of a translucent pulvillar lobe), the elaboration of a translucent keel under the anterior metatarsi (Platnick 1995: figs 6, 7), and the presence of a distal, translucent, fan-shaped extension of the intersegmental membrane separating the anterior metatarsi and tarsi (Platnick 1995: figs 8–11).”

The shape and position of the unpaired claw is an interesting character. For example, in *Nopsides*, Jiménez *et al.* (2011) found that the unpaired claw of legs I–II is elongated, extending dorsally between the paired claws, whereas the unpaired claws of legs III–IV have been lost entirely. In the genus *Cubanops*, Sánchez-Ruiz *et al.* (2010) showed that all the unpaired claws are small and positioned normally. The genus *Nops* is known to have elongated and reflexed claws, but no detailed studies have been done for all species that are included in the genus.

**Female:** Total length: 4.0; carapace length: 2.5; carapace width: 1.2. CEPHALOTHORAX: Carapace as in male; pars cephalica less elevated than in male. Sternum, labium, endites and chelicerae as in male. ABDOMEN: Oval, purplish-gray dorsally, light purplish-gray ventrally with whitish median band. LEGS: as in male; total length leg I: 0.59; II:0.52; III:0.50; IV: 0.61; palpal femur with stridulatory pick basally; palpal tibia prolaterally with brush of seven setae; palpal tarsus slightly expanded, without claw, ventral surface densely covered with strong setae; apicodorsal surface with patch of shortened setae. GENITALIA: Epigastric region slightly sclerotized (Fig. 13).

**Other material examined.** *Los Ríos:* Río Palenque, 24–27.ii.1977, 1♂1♀, J. Vries (QCAZ); CC Rio Palenque, 220m, 00°54S 79°00W, Sept. 1976, 1♀, 02 Feb. 1977 1♀, 02 Mar 1977, 1♂1♀, 27 Feb. 1977, 2♂1♀, bosque primario, T. deVries (QCAZ); 24 Feb. 1977, 1♂1♀, bosque secundario, T. deVries (QCAZ); 22 Feb. 1977, 1♂, *Theobroma cacao*, T. deVries (QCAZ); 15 Sept. 1988, 1♀, S. Sandoval (QCAZ); CCRP coleccion MAB Unesco, 20 Dic. 1980, 1♂1♀, bosque primario, S. Sandoval (QCAZ); 27 Dic. 1980, 1♂, 16. Feb. 1980, 1♂, 20 Feb. 1980, 1♂, Feb. 1980, 1♀, S. Sandoval (QCAZ); 22 Nov. 1981, 1♂, pitfall, bosque secundario cerrado, S. Sandoval (QCAZ); CCRP, 30 Ago. 1977, 2♂1♀, 19. ix.1978, 1♀, S. Sandoval (QCAZ). *Cotopaxi:* Las Pampas 78°57'04"W 00°25'15"S, 1500m, 02 Jul. 1997, 1♂, I.G. Tapia (QCAZ).

**Distribution.** Los Ríos Province, Cotopaxi Province, Ecuador.

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