The direct-developing frogs of the genus *Pristimantis* Jiménez de la Espada, 1870 are the most speciose genus of amphibians in the world, with 459 known species (AmphibiaWeb, 2013). However, despite the species of this genus are distributed from southern Central America to Northern South America, its major diversity is concentrated on the Andes of Colombia, Ecuador, and Peru (Hedges et al. 2008). About 123 species of *Pristimantis* are currently known in Peru (AmphibiaWeb, 2013), occurring from the coastal and Amazonian lowlands up to 4,000 m in the Andes (Duellman & Lehr, 2009).

Herein, we report new locality records and altitudinal range extension for *Pristimantis schultei*, and latitudinal and altitudinal range extension for *P. corrugatus* and *P. wagteri*. Specimens were obtained from field surveys and are currently deposited in the herpetological collection of the Centro de Ornitología y Biodiversidad (CORBIDI), Lima, Peru. Furthermore, we provided an updated map for these species in northern Peru.

**Pristimantis corrugatus.** This species was previously known from its type locality, Ullilén, and two adjacent localities (El Plomo Lake and Quitecocha Lake), Mariscal Cáceres Province, San Martín Region, Peru, at elevations of 3,000 and 3,130 m, in the northern portion of the Cordillera Central (Duellman et al., 2006; Duellman & Lehr 2009).

Here we provide nine additional localities for *Pristimantis corrugatus*: Área de Conservación Privada Huiquilla (ACP Huiquilla), Luya Province, Amazonas Region (-6.37583, -77.97667; Datum=WGS84; 2935-2941 m); Sunipampa (near Leimebamba), Chachapoyas Province, Amazonas Region (-6.75361, -77.79972; Datum=WGS84; 2521 m); Laurel and Las Piñas, Mariscal Cáceres Province, San Martín Region (-6.68667-77.69667; Datum=WGS84; 2756-3281 m); Molinopampa, Chachapoyas Province, Amazonas Region (-6.26778, -77.58527; Datum=WGS84; 2566-2574m); Bagazán, Rodríguez de Mendoza Province, Amazonas Region (-6.13361, -77.46694; Datum=WGS84; 3067 m); Quebrada Salas (Vista Alegre), Rodríguez de Mendoza Province, Amazonas Region (-6.11194, -77.44000; Datum=WGS84; 2575-2578 m); Sedrusco (Vista Alegre), Rodríguez de Mendoza Province, Amazonas Region (-6.10667, -75.41778; Datum=WGS84; 2403-2405 m); San Pedro (Lonya Chico), Luya Province, Amazonas Region (-6.23389, -78.12167; Datum=WGS84; 2826 m); and La Colpa, Rodríguez de Mendoza Province, Amazonas Region (-6.39361, -77.22861; Datum=WGS84; 2347 m).

These specimens have prominent and conical tubercles on the upper eyelids and heels, Toe V slightly longer than Toe III, snout short, rounded in dorsal view and profile, dorsum shagreen and venter areolate; a snout-vent length (SVL) range of 15.31-29.03 mm (females) and 11.87-25.11 mm (males) and a mean of 23.40±1.26 mm (females) and 16.49±0.45 mm (males). Duellman et al. (2007), highlighted that *P. corrugatus* is unique by lacking contrasting markings in the groin. However, all specimens of *P. corrugatus* have red blotch groins, including 16 specimens (CORBIDI 11018, 11024-28, 11030-39) collected at type locality. Duellman et al. (2007) reports this species as having a reddish tan dorsum with dark brown markings or tan with dark brown middorsal and dorsolateral stripes. Two specimens (CORBIDI 11654, 11678) have dorsum black with a yellow thin middorsal stripe and reddish
blotches on axilla. One male (CORBIDI 10979) have dorsum green with a dark brown interobital bar. Two specimens (CORBIDI 11653, 11656) have a dark middorsal band on a tan dorsum (Fig. 1).

New records reported herein are the first reports for this species from the Amazonas Region. Sedrusco (Vista Alegre) represents the northernmost locality, extending its range ca. 87.5 km from type locality.

**Pristimantis schultei.** This species was previously known from three localities in Peru: Levanto (type locality), Mendoza in Amazonas Region and Ullilén/ Los Cóndores Lake in San Martin Region, at elevations of 2400 and 2850m in the Cordillera Central in northern Peru (Duellman, 1990; Duellman and Pramuk, 1999; Duellman and Lehr, 2009). Recently, Yáñez-Muñoz et al. (2012) reported the first report of this species in Ecuador from Tapichalaca Biological Reserve, Zamora-Chinchipe Province and San Antonio de Jubal, Cañar Province, extending its distribution 421 km northwest from the type locality. Duellman and Lehr (2009), recorded *P. schultei* at Mitobamba in Cajamarca Region, but we suspect that these specimens could represent an undescribed species, based in our revision of several *Pristimantis* related to lacrimosus group from Cajamarca. These specimens have mainly smooth dorsum instead of shagreen like *Pristimantis schultei* (a condition that resembles sandpaper or shark skin). Furthermore, coordinates provided in the Appendix II of Duellman and Lehr (2009) fall in the pacific versant of Lambayeque Region (see query in Fig. 4). A detailed revision of these specimens is necessary to assess the identity of *P. schultei* in Cajamarca.

Here we provide seven new localities for *Pristimantis schultei*: Yuramarca, Bongara Province, Amazonas Region (-6.02583, -77.85499; Datum=WGS84; 2857-2916 m); was collected in ACP Huiquilla, Luya...
Province, Amazonas Region (-6.37917, -77.97833; Datum=WGS84; 2935 m); were collected in Laurel, Mariscal Cáceres Province, San Martín (-6.68333, -77.69444; Datum=WGS84; 2799 m); Quebrada Salas (Vista Alegre), Rodríguez de Mendoza Province, Amazonas Region (-6.11194, -77.44000; Datum=WGS84; 2575-2578 m); Sedrusco (Vista Alegre), Rodríguez de Mendoza Province, Amazonas Region (-6.10666, -75.41778; Datum=WGS84; 2403-2405 m elevation); were collected in San Pedro (Lonya Chico), Luya Province, Amazonas Region (-6.23389, -78.12167; Datum=WGS84; 2826-3302 m); and La Colpa, Rodríguez de Mendoza Province, Amazonas Region (-6.39361, -77.22972; Datum=WGS84; 2347 m).

All specimens reported herein have acuminate snout in dorsal view, inclined posteroventrally in profile, skin on dorsum shagreen that on venter is weakly areolate, and tympanum distinct as described by Duellman (1990) and Duellman & Lehr (2009) for *Pristimantis schultei* (Fig. 2). The specimens of *P. schultei* reported here have a SVL range of 28.72-32.04 mm (females) and 21.05-30.83 mm (males) and a mean of 30.39±0.96 mm (females) and 24.98±0.28 mm (males).

La Colpa is the easternmost locality, extending its range ca. 70 km from type locality, and San Pedro is the highest locality, increasing its altitudinal range to nearly 3,300 m above sea level.

**Pristimantis wagteri.** This species was previously known only for the type locality in the vicinity of the Ulilén/Los Cóndores Lake, Mariscal Caceres Province, San Martin Region, at elevation of 2800 and 3000 m (Venegas, 2007; Duellman & Lehr 2009).

Here we provide two additional localities: Quebrada Salas (Vista Alegre), Rodríguez de Mendoza Province,
Amazonas Region (-6.11361, -77.44; Datum=WGS84; 2575-2582 m), and San Pedro (Lonya Chico), Luya Province, Amazonas Region (-6.23389, -78.12167; Datum=WGS84; 2826 m elevation).

The specimens reported herein have tubercles on the flanks in longitudinal rows, snout that is acuminate in dorsal view and in profile, and tympanum prominent according with the diagnosis provided by Venegas (2007) for *Pristimantis wagteri*. The specimens have a SVL range of 22.14-38.37 mm and a mean of 26.34±1.47 mm for males. No females were found at these localities.

Venegas (2007) report dorsum olive tan, green or pink with the dorsolateral Region much darker than dorsum and venter dark gray without marks and flecks, but the specimens from Quebrada Salas (Vista Alegre) have venter dark grey with irregular flecks. Twelve specimens (CORBIDI 11661-63, 11672-73, 11688, 11702-03, 11711-12, 11717, 12374) have yellow spots in the groin; six of the last (CORBIDI 11662-63, 11672-73, 11703, 11711) show yellow spots in the axilla. Additionally, an individual (CORBIDI 11021) collected in the type locality, on 17 May 2012, shows a dark brown dorsum with a dark orange middorsal blotch. (Fig. 3)

These records are the first for the Amazonas Region, whereas Quebrada Salas (Vista Alegre) represents the northernmost locality, extending its range ca. 86.1 km from type locality.

**Acknowledgments.** Beraún and Venegas are grateful to his field companions: D. Vasquez, A. Garcia, L.Y. Echevarria, M. Salas, G. Chávez, K. Garcia-Burneo and F. Diaz. We also thank M. Ortega-Andrade and M. Yánez-Muñoz for reviewing the manuscript. Specimens used in this paper were collected with the following permits: 110-2007-INRENA-IFFS-DCB; 118-2007

---

**Figure 3.** Variation in color pattern in specimens of *Pristimantis wagteri*: A. CORBIDI 11662, male (Quebrada Salas); B. CORBIDI 12374, male (San Pedro); C. CORBIDI 11021, female (Ulilén); D. CORBIDI 11702, male (Quebrada Salas).
Field trips were founded by simultaneous efforts of non-governmental organizations, UCUMARI and Asociación Peruana para la Conservación de la Naturaleza (APECO), with the Gobierno Regional de Amazonas (GOREAM).

References


Appendix 1. Voucher specimens.

*Pristimantis corrugatus*: Amazonas: ACP Huiquilla (CORBIDI 00365-67, 00369-71, 00381-89, 00543-46), Sunipampa (CORBIDI 00549-52, 00554-68), Molinopampa (CORBIDI 10897-905), Bagażan (CORBIDI 11653-56), Quebrada Salas (CORBIDI 11674-76, 11678-82, 11686-87, 11690-91, 11700), Sedrusco (CORBIDI 11721, 11723, 11743), San Pedro (CORBIDI 12346, 12364, 12367), La Colpa (CORBIDI 12877-82, 12884).

*San Martín*: Laurel and Las Piñas (CORBIDI 00597, 00603-04, 00606-07, 00612, 00614, 00616).

*Pristimantis schultei*: Amazonas: Yuramarca (CORBIDI 00452-62), ACP Huiquilla (CORBIDI 00368), Quebrada Salas (CORBIDI 11659-660, 11689, 11693-96, 11701, 11708, 11725-33), Sedrusco (CORBIDI 11737-38, 11740-41), San Pedro (CORBIDI 12349-63, 12365-66, 12370-71), La Colpa (CORBIDI 12870-75, 12883).


*Pristimantis wagteri*: Amazonas: Quebrada Salas (CORBIDI 11661-63, 11672-73, 11688, 11702-03, 11711-12, 11717, 11803), San Pedro (CORBIDI 12374).

---

**Table 1. Summary of new locality records for Pristimantis species in northern Peru.**

<table>
<thead>
<tr>
<th>REGION</th>
<th>PROVINCE</th>
<th>LOCALITY</th>
<th>P. corrugatus</th>
<th>P. schultei</th>
<th>P. wagteri</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bongara</td>
<td>Yuramarca</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Chachapoyas</td>
<td>Molinopampa</td>
<td>Sunipampa</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laya</td>
<td>ACP Biaquilla</td>
<td>San Pedro</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Bagażan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rodríguez de Luya</td>
<td>Quebrada Salas</td>
<td>Sedrusco</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>San Martín</td>
<td>Mariscal Cáceres</td>
<td>Laurel/Las Piñas</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 4.** Map of new locality records for *Pristimantis* species for northern Peru. *P. corrugatus*: circles, *P. schultei*: squares, *P. wagteri*: triangles. Black symbols represent the type locality of each species, red symbols represent previously known localities, and blue symbols represent new localities.

Distribution and map for *Pristimantis corrugatus*, *P. schultei* and *P. wagteri* in Peru

INRENA-IFFS-DCB; 0581-2011-AG-DGFFS-DGEFFS. Field trips were founded by simultaneous efforts of non-governmental organizations, UCUMARI and Asociación Peruana para la Conservación de la Naturaleza (APECO), with the Gobierno Regional de Amazonas (GOREAM).