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## A NEW SPECIES OF BABBLER (TIMALIIDAE: *STACHYRIS*) FROM THE SINO-VIETNAMESE BORDER REGION OF CHINA

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**ABSTRACT.**—Since 2004, we have surveyed birds in the southwest Guangxi Zhuang Autonomous Region of China. Many times during February, July, and October 2005 and January 2006, we observed, in Nonggang Natural Reserve of Guangxi, a species in the family Timaliidae that has never been recorded before in China or Southeast Asia. Nonggang Natural Reserve is located in the Sino-Vietnamese border region at 22°13'–22°34'N, 106°42'–107°05'E, 18 km southeast of the Vietnamese border. On 21 January 2006, we captured two individuals. Subsequent investigation showed that the specimens belonged to a previously undescribed species, which we designate *Stachyris nonggangensis*, the Nonggang Babbler. Received 22 May 2006, accepted 30 July 2007.

Key words: new species, Nonggang Babbler, Sino-Vietnamese border region, *Stachyris nonggangensis*, Timaliidae.

### Une nouvelle espèce de Timaliidae (*Stachyris*) dans la région de la frontière Sino-Vietnamienne en Chine

**RÉSUMÉ.**—Depuis 2004, nous avons inventorié les oiseaux dans le sud-ouest de la région autonome zhuang du Guangxi, en Chine. À plusieurs reprises en février, juillet et octobre 2005 et janvier 2006, nous avons observé, dans la Réserve naturelle de Nonggang au Guangxi, une espèce de la famille des Timaliidae qui n'avait jamais été notée auparavant en Chine ou dans le sud-est de l'Asie. La Réserve naturelle de Nonggang est située dans la région de la frontière Sino-Vietnamienne à 22°13'–22°34'N, 106°42'–107°05'E, à 18 km au sud-est de la frontière vietnamienne. Le 21 janvier 2006, nous avons capturé deux spécimens. Les recherches subséquentes ont démontré que les spécimens appartenaient à une espèce inconnue jusqu'à présent, que nous avons nommée *Stachyris nonggangensis*.

WE HAVE SURVEYED birds in the southwest Guangxi Zhuang Autonomous Region of China since 2004, under a project funded by the National Natural Science Foundation of China. During this survey, we observed a bird species many times that has never been seen before. Our sightings were made at several sites in the Nonggang Natural Reserve, southwest Guangxi, in February, July, and October 2005 and in January 2006. Nonggang Natural Reserve is located in Longzhou County of south Guangxi, 18 km southeast of the Vietnamese border (Fig. 1). This is a mountainous karst area with well-developed seasonal rainforest and bushes. The undescribed bird belongs to the family Timaliidae and has a medium-sized body and strong legs. Most of the individuals we observed were on rocks in forests, and few were in trees. To better study the unknown species, we set 20 mist nets (8 m × 3 m × 36 mm mesh) on 19 January 2006 in the sites where the birds often appeared. The mist nets were set 10 m apart on a hillside in karst rainforest (22°28'N, 106°57'E; elevation 290 m). On 21 January 2006, we captured the holotype and the paratype in two of these nets.

The two birds have short but rounded wings ~68 mm long, a medium-length tail ~61 mm long (thus, the wings are longer than the tail), stiff quills in the forehead feathers, and oval nares. On the basis of these characteristics, the bird should be identified as a species in the genus *Stachyris* (Cheng et al. 1987). We have examined specimens at the Biology Museum of Guangxi University, Guangxi Academy of Sciences, and the Museum of Kunming Institute of Zoology, where there are no specimens similar to ours. There are 25–27 species in the genus *Stachyris* (Howard and Moore 1991, Clements 2000, Zheng et al. 2002). Comparison of descriptions and depictions shows that this form is not conspecific with any known species of *Stachyris*. It is somewhat similar to the Sooty Babbler (*Stachyris herberti*; Eames et al. 1995, Robson 2005), but its black bill, dark grayish-brown spots on white throat and upper breast, white crescent-shaped patch behind the ear coverts, and the lack of an eye-ring distinguish it readily from *S. herberti* (Figs. 2 and 3). Of the new species of timaliids recently described from Southeast Asia (Eames and Eames 2001, Vogel

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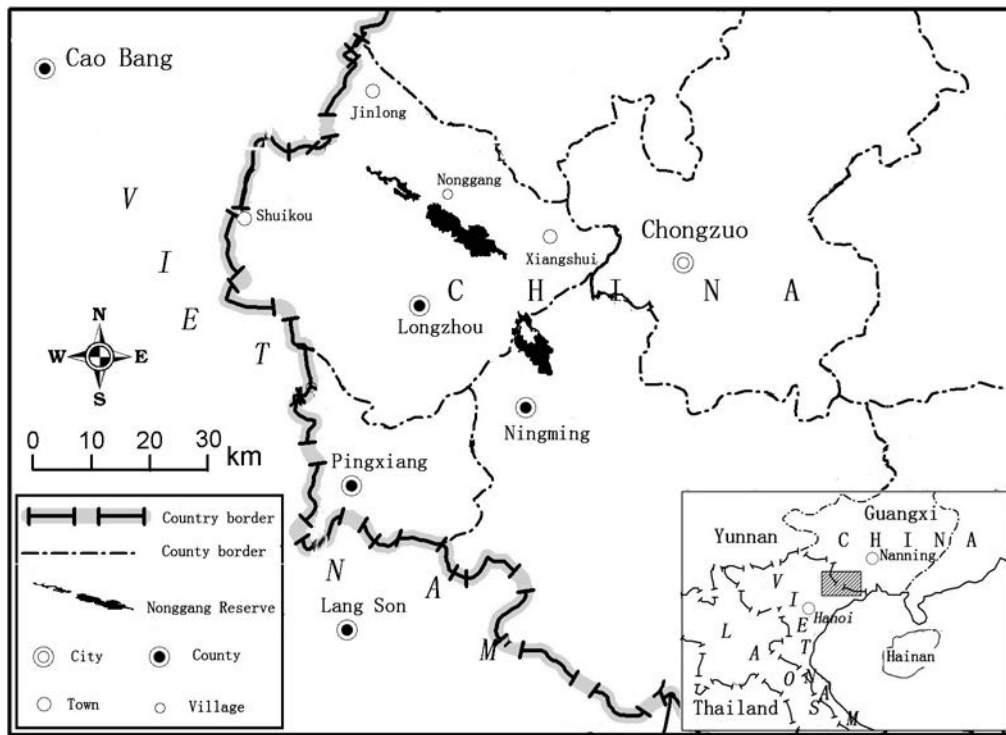


FIG. 1. Map of the type locality of *Stachyris nonggangensis*.

et al. 2003, Rappole et al. 2005), none is of the genus *Stachyris* and all are obviously different from the unknown species. No other species of Timaliidae are more similar in appearance to the unknown species than the above (Cheng et al. 1987, Grimmett et al. 1999, Kennedy et al. 2000, MacKinnon and Phillipps 2000, Strange 2002, Robson 2005).

Therefore, we are certain that the Nonggang specimens represent a new species of *Stachyris*, for which we propose the following name:

***Stachyris nonggangensis*, sp. nov.**  
Nonggang Babbler

*Holotype*.—College of Animal Sciences and Technology, Guangxi University (GXA no. B08266); male, Nonggang, Longzhou

County, Guangxi Zhuang Autonomous Region, China, 22°28'N, 106°57'E, 290 m elevation; collected 21 January 2006 by J.A. and prepared by Z.F.; original field catalogue number Ng 06001.

*Diagnosis*.—A timaliid assignable to the genus *Stachyris* by the combination of the following characteristics: relatively short, rounded wings and medium-length rounded tail; wings longer than tail; relatively strong legs; medium-length straight bill; stiff forehead feathers; oval nares; and general body proportions. Separable from the other species in the genus by the following characteristics: relatively large size; wing length >65 mm (Table 1); dark-grayish-brown body and chin; broad dark-grayish-brown spots on white throat and upper breast; white crescent-shaped patches behind ear coverts; and black bill.

*Description of holotype*.—Color classification scheme follows the Munsell color chart used by soil scientists. The bill is black at

TABLE 1. Information on holotype and paratype of *Stachyris nonggangensis*.

Guangxi University collection number	Type	Culmen <sup>a</sup> (mm)	Tarsus <sup>b</sup> (mm)	Wing <sup>c</sup> (mm)	Tail <sup>d</sup> (mm)	Mass (g)	Skull (%)	Fat	Gonads (mm)
B08266	Skin, partial (alcoholic)	17.6	29.2	68.2	61.1	33.0	100	Light	Testes 2 × 1; 2 × 1
B08267	Skin, partial (alcoholic)	18.3	30.2	69.3	61.2	38.0	100	Light	Ovary: 5 × 9; largest ovum: 2

<sup>a</sup>Exposed culmen.

<sup>b</sup>Measured from distal to proximal end of the tibiotarsus on the bird's right side.

<sup>c</sup>Measured from bend of wing to tip of longest primary (unflattened) on the bird's right side.

<sup>d</sup>Measured from insertion to tip of outermost rectrix on the bird's right side.



FIG. 2. Lateral comparison (upper: *Stachyris nonggangensis*; lower: *S. herberti*).

the base, the maxilla is also black with a paler tip, and the distal half of the mandible is increasingly pale toward the tip, approaching strong brown (7.5 YR 5/6). The forehead, crown, lores, and chin are dark grayish brown (7.5 YR 2/2<sup>+</sup>). The rachises of the forehead feathers are stiff. The fore parts of the auriculars and malar region are dark grayish-brown, behind which is white, forming a white crescent-shaped patch. The feathers of the throat and upper breast are white, and the rachises and distal parts of feathers are dark grayish brown, making dark-grayish-brown spots on the white throat and upper breast. The sides of the breast, lower breast, and belly are dark grayish brown, as are the flanks, hind neck,

and sides of neck. The mantle, upper and lower scapulars, upper back and lower back, rump, and upper tail coverts are brown (10 YR 4/3<sup>-</sup>). The primaries, secondaries, tertials, lesser coverts, median coverts, greater coverts, and rectrices are brown. The sides of abdomen, undertail coverts, and vent are brown. The iris is light grayish green (10 BG 6/1). The tarsus, claws, and feet are reddish black (10 R 2/1).

*Measurements of holotype*.—Unflattened wing 68 mm, tail 61 mm, bill (base at skull to tip) 19 mm, bill depth at nares 6.1 mm, tarsus 29 mm, two testes 2 × 1 mm, skull 100% ossified, body mass 33 g.



FIG. 3. Ventral comparison (upper: *Stachyris nonggangensis*; lower: *S. herberti*).

*Specimens examined.*—Two specimens of *S. nonggangensis* have been examined: the holotype and paratype. The holotype (GXA B08266) and the paratype (GXA B08267) were captured on the same day, along the same net line, within 20 m of each other.

*Etymology.*—We name this species in reference to the collection site, Nonggang Natural Reserve, which is located in south Guangxi (22°13′–22°34′N, 106°42′–107°05′E) and covers an area of 101 km<sup>2</sup>, 18 km southeast of the Vietnamese border. The reserve was named after Nonggang, a small village located in a limestone region 2 km from the collection site.

#### REMARKS

*Variation within the type series.*—We have only two specimens, a male and a female, so we have few data on variation within the type series. However, among the 30 Nonggang Babblers we observed at five sites in the field, no variation was apparent.

*Sexual variation.*—The specimens do not differ in coloration. The male weighed slightly less and was slightly shorter than the female in body, wing, and tarsus lengths (Table 1), but we cannot determine whether this is sexual size-dimorphism or individual variation.

*Reproduction.*—The testes of the male measured 2 × 1 mm; the ovary of the female was 5 × 9 mm; the largest ovum was 2 mm. Nonggang Babblers were still in flocks when the specimens were taken; thus, the sex organs had already started to develop in late January, but the birds were not in breeding condition. In late February, we again visited the collection locality but did not see the Nonggang Babbler in flocks. They were not seen in groups in February 2005, but some pairs were observed. In the region of the Sino-Vietnamese border, the breeding period of birds in the family Timaliidae is from late February to July, and fledglings are often seen in early April (Zhou et al. 2004). No nest of the Nonggang Babbler has been found to date.

*Habitat and behavior.*—The principal habitat for the species is the karst seasonal rainforest. After selective cutting, the dominant tree species in this rainforest is *Excentrodendron hsienmu* (Forestry Department of Guangxi Province 1993). The Nonggang Babblers were often seen walking on rocks and were seldom seen in trees or flying. The birds flew only short distances, and only when frightened. The behavior of *S. nonggangensis* is similar to that of wren babblers (*Napothera* spp.), with which it co-occurs in this area. Nonggang Babblers often forage in the gaps between two rocks by turning over the fallen leaves, apparently preying on insects and other arthropods. Sometimes they foraged on the small mounds that appeared after the trees were logged. They were seen only in single-species flocks in winter. They occurred in flocks of 5–10 individuals in the nonbreeding period but were often seen in pairs during the breeding period.

Grey-throated Babblers (*Stachyris nigriceps*) and Spot-necked Babblers (*S. striolata*) were captured several times in the area where we found Nonggang Babblers. Unlike the Nonggang Babbler, these two species mainly inhabit the undergrowth, searching for food among leaves and twigs and seldom coming down to the ground.

*Distribution and status.*—The known distribution of *S. nonggangensis* is limited to the Nonggang Natural Reserve. Despite

extensive observational and netting surveys in heavily degraded to pristine forest in the non-limestone mountains of the Sino-Vietnamese border areas of south Guangxi since 2004, we have not encountered the species there. However, we often observed it in the limestone area of Nonggang Natural Reserve.

Because of the species' specialized habitat requirements, we presume that its distribution is limited to the limestone region and the well-protected vegetation of the Sino-Vietnamese border area, including southwest Guangxi of China and the limestone region of the northern highlands of Vietnam. Similar habitats may extend westward into adjacent southeast Yunnan Province.

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