The generic taxonomy of parrotbills (Aves, Timaliidae)

JOHN PENHALLURICK and CRAIG ROBSON

The parrotbills are typically considered to contain just three genera: Conostoma, Paradoxornis and Panurus. Discounting Panurus from consideration (it has recently been shown to have a distant relationship to the babblers), we maintain a single species in Conostoma, C. aemodium, and assign the species currently lumped into Paradoxornis among seven genera that fall into two groups based in part on size: the first group (which also includes Conostoma) consists of Hemirhynchus (for paradoxus and unicolor), Psittiparus (for gularis, margaritae, ruficaps and baker) and Paradoxornis (for flavirostris, guttaticollis and heudei); the second comprises Chleuasicus (for atrosuperciliaris), a new genus Sinosuthora (for daviulana) and Suthora (for fulvifrons, verreauxi, nipalensis, humii, poliotis, ripponti and beauclercii).

INTRODUCTION

Earlier accounts of the parrotbills, such as Sharpe (1883), Hartert (1907), Hartert and Steinbacher (1932–38), and Baker (1930), treated them in multiple genera, but in recent works (Deignan 1964, Dickinson 2003, Robson 2007) the great majority have been placed in Paradoxornis. This arrangement goes back to Delacour (1946), who assigned all taxa except Great Parrotbill Conostoma aemodium and Bearded Reedling Panurus biarmicus to Paradoxornis. His explanation for this radical move was brief, and roughly translates as follows:

The vast genus Paradoxornis (Suthora, Psittiparus, Neosuthora and Cholornis are synonyms) includes very variable height and form of which the beak varies a great deal in height and power. The case of P. paradoxus of Gansu is extraordinary; this bird is almost identical to P. unicolor of the Himalayas and of Yunnan, but it lacks one toe on its claw; these are assuredly very close forms, almost conspecific. The small species such as P. fulvifrons, P. nipalensis, P. verreauxi resemble the tits with long tails (Aegithalos) and probably constitute a transition between the tits and the babblers.

It is remarkable that so drastic a revision should have been accepted with so little justification. Deignan (1964) followed suit without any discussion. However, just as the lumping of almost all laughingthrushes into the genus Garrulax has recently been seen as excessive (Rasmussen & Anderton 2005, Collar & Robson 2007), so the lumping of almost all parrotbills into Paradoxornis also seems now to be in need of reconsideration.

Yeung et al. (2006), basing their molecular analysis on a combination of mitochondrial genes cytochrome-b and ND2 for a total of 2,184 base pairs, showed that the genus Paradoxornis (as most recently recognised) is paraphyletic. In particular, Conostoma is embedded in the middle of the genus Paradoxornis. Their analysis clearly supports a return to a polygeneric arrangement of the parrotbills. Here we use evidence from morphology, calls and songs to reinforce the view that a return to something like the earlier multiple-genera treatment of parrotbills is desirable. We also discuss some generic names proposed recently which are invalid, with notes on recent splits and possible further splits. However, we exclude the genus Panurus. Molecular evidence demonstrates that Panurus biarmicus has a more distant relationship to other parrotbills than was previously thought, and appears to have a closer relationship to non-babbler species (Ericson and Johansson 2003, Alström et al. 2006, Jemsson and Fjeldså 2006). Consequently its common name should revert to Bearded Reedling, in order to reflect this distant relationship. We will go through the genera we propose, giving the full citation for the generic name, plus synonyms, and listing the species we assign to each genus, and its subspecies, with detailed distribution provided for both monotypic species and subspecies.

THE GENERA AND SPECIES

Conostoma Hodgson, 1842


• Conostoma aemodium Hodgson, 1842 Great Parrotbill. India (Himalayas from Uttarkhand to Arunachal Pradesh); Nepal; Bhutan; south Tibet; north Myanmar; China (south Gansu, south Shaanxi, Sichuan, north-west Yunnan).

The sole member of the genus Conostoma is much larger than the other parrotbills (27.5–28.5 cm; 88–110 g), and has a less graduated tail. The outermost pair of retrices is about three-quarters of the total length of the tail. The bill is longer than its height, and is proportionately much longer than those of other parrotbills. Both males and females are grey-brown, with a whitish forehead. This assignment is consistent with the treatments of Sharpe (1883), Hartert (1907, 1932–38) and Deignan (1964).

Hemirhynchus Hodgson, 1843

Hemirhynchus Hodgson, 1843, Journal of the Asiatic Society of Bengal 12: 1007. New name for Heteromorpha Hodgson, 1843, hence the type is Heteromorpha unicolor Hodgson, 1843. Synonyms: Heteromorpha Hodgson, 1843, not Heteromorpha Heubner, 1822 (Lepidoptera); Cholornis J. Verreaux, 1870.

• Hemirhynchus paradoxus (J. Verreaux, 1870) Three-toed Parrotbill. H. p. paradoxus. China (south Gansu, south-east Shaanxi [Daba Shan], west-central, north and north-east Sichuan.

H. p. taipaiensis (Cheng, Lo and Chao, 1973). China (south Shaanxi [Qinling Shan]).

• Hemirhynchus unicolor (Hodgson, 1843) Brown Parrotbill. West-central to east Nepal; India (Himalayas of West Bengal, Sikkim and Arunachal Pradesh); Bhutan; south-east Tibet; north Myanmar; China (west-central to south-west Sichuan, north-western Yunnan). These two very similar species range in length from 20–21 cm and weigh 31.5–39 g. They are similar in size.
to the species discussed in relation to Paradoxornis sensu stricto below, but their overall plumage more closely resembles that of Great Parrotbill. Their voices also differ from those of species placed in Paradoxornis sensu stricto, and their songs resemble those of the Great Parrotbill, consisting of rather loud, clear, relatively phrased songs, comprising usually up to four notes; in contrast, their call notes differ from those of Great, consisting of guttural calls, short shrill whining sounds and harsh crackling notes. The species paradoxus was assigned to Cholorinus in Sharpe (1883) and Hartert (1907, 1932–1938)—evidently in ignorance of the priority of Hemirhynchus—while both authors plus Baker (1930) assigned unicolor to Suthora.

Yeung et al. (2006) used the generic name Heteromorpha for this group in a figure in their presentation labelled ‘Congruence between molecular phylogeny and Robson’s taxonomy’. However, as noted above, this name is preoccupied.

Psittiparus Hellmayr, 1903
Psittiparus Hellmayr, 1903, Das Tierreich Lief. 18: 163.

Psittiparus gularis (G. R. Gray, 1845) Grey-headed Parrotbill.
P. g. gularis. India (Sikkim, north West Bengal, west Arunachal Pradesh); Bhutan.


Psittiparus margaritae Delacour, 1927 Black-breasted Parrotbill. Extreme east Cambodia (south-east Mondulkiri); Vietnam (southern highlands of S Annam).

Psittiparus ruficeps (Blyth, 1842) White-breasted Parrotbill. India (Sikkim, north West Bengal, Arunachal Pradesh [except east/south-east]); Bhutan.

Psittiparus bakeri (Hartert, 1907) Greater Rufous-headed Parrotbill.
P. b. bakeri. India (south-east Arunachal Pradesh, south Assam, Meghalaya, Nagaland, Manipur, Mizoram); extreme north-east Bangladesh; south-east Tibet; north, east and south-east Myanmar; north Laos; China (north-west Yunnan).


Birds in this group are somewhat smaller in size than the previous and following groups, ranging from 15.5–19.5 cm in length, and 27–37 g in weight. With this group, the tail is almost equal in length to the wing, and shows little graduation, with the outermost feathers about five-sixths the length of the central feathers. They have relatively well-structured songs, with those of White-breasted and Greater Rufous-headed Parrotbills being particularly varied, jolly and emphasised. All species give distinctive joiw and jew call notes, those of White-breasted and Greater Rufous-headed being louder and more clearly audible. In addition, when alarmed, Grey-headed Parrotbill utters harsh scolding rattles like those of a scimitar-babbler Pomatorhinus, and White-breasted and Greater Rufous-headed Parrotbills, in a similar context, emit a highly distinctive loud, metallic, spluttering rattle. Collar (2006) provided evidence that the isolated form margaritae of south Indochina should be split from P. gularis, and this treatment was followed by Robson (2007). King and Robson (2008) provided reasons for splitting P. bakeri from P. ruficeps. Sharpe (1883) assigned both ruficeps and gularis to Suthora; Hartert (1907) and Baker (1930) assigned both to Psittiparus.

Paradoxornis Gould, 1836

Paradoxornis flavirostris Gould, 1836 Black-breasted Parrotbill. India (Brahmaputra R floodplains in West Bengal, north-east Assam, and immediately adjacent areas of Arunachal Pradesh; formerly south Assam); formerly north-east Bangladesh.

Paradoxornis guttaticollis David, 1871 Spot-breasted Parrotbill. India (extreme east Arunachal Pradesh, south Assam, Meghalaya, Nagaland, Manipur, Mizoram); east Bangladesh; west, north, east and south-east Myanmar; north-west Thailand, north Laos; Vietnam (west and east Tonkin); China (south Gansu and south Shaanxi south to west-central Sichuan and Yunnan, and east through Guizhou, north Guangxi and north Guangdong to north Fujian).

Paradoxornis heudei David, 1872 Reed Parrotbill.
P. h. poliavanovii Stepanyan, 1979. Extreme east Mongolia; China (north-east Nei Mongol and Heilongjiang); extreme south-east Russia (Lake Khanka region of Ussuriland).
P. h. heudei. China (south-east Shandong south along coast to north Zhejiang, and inland in Yangtze R system to north Jiangxi [jiujiang area]). Populations in north and south Hebei and coastal Liaoning not yet assigned to race.

As with the species assigned to Hemirhynchus, this group is relatively large, with the length of the three species being 18–22 cm. Spot-breasted Parrotbill comes in at 26.5–40 g on current knowledge. Reed Parrotbill is considerably lighter, with late summer females being as little as 15.9 g (although Spot-breasted may not have been weighed at this season). All species are characterised by a strongly graduated tail, the outer feathers not more than two-thirds the total tail length. The bill is short and deep; the cutting edge of the upper mandible has a deep, S-shaped curve, and there is a corresponding curve in the lower mandible. In terms of voice, Black-breasted and Spot-breasted have songs made up of a variable series of clear, quite high staccato notes, which are very similar to...
each other. The song of Reed Parrotbill is equally varied, although often consisting of more notes. Sharpe (1883) and Baker (1930) assigned flavirostris and guttaticollis to Paradoxornis; Hartert (1907) assigned flavirostris to Cholornis and guttaticollis to Suthora.

Stepanyan (1979) proposed that the east Mongolian population of Reed Parrotbill was worthy of subspecific recognition under the name mongolicus. Stepanyan (1998) raised polivanovi to full species status, distinct from heudei, with mongolicus as a subspecies. However, Stepanyan's theory was based on the presumed ‘huge’ gap between northern polivanovi and southern heudei. Since then, as noted by Robson (2007: 319), populations of Reed Parrotbills have been found in the intervening areas, and it is probable that, when a full geographical series of specimens can be examined, the differences separating the northern and southern taxa will turn out to represent no more than the end points of a cline. Such a cline would mean that polivanovi would at best be accorded subspecies status, if it deserved recognition at all. We follow Robson (2007) in recognising polivanovi as a subspecies of heudei and in returning mongolicus to the synonymy of polivanovi.

The four genera discussed so far form a natural group: the length of all species exceeds 15 cm. The genera to be discussed next also form a natural group, with all taxa having total lengths of 15 cm or less.

Chleuasicus Blyth, 1845

- **Chleuasicus atrosuperciliaris** Godwin-Austen, 1877
  - Lesser Rufous-headed Parrotbill.
    - *C. a. oatesi* (Sharpe, 1903). India (Sikkim, north-west Bengal, west and central Arunachal Pradesh); Bhutan.
    - *C. a. atrosuperciliaris*. India (east Arunachal Pradesh, extreme east Meghalaya, south Assam, Nagaland, Mizoram); north and south-east Myanmar; extreme north-west Thailand; north and central Laos; Vietnam (west and east Tonkin); China (west and north-west Yunnan).

**Chleuasicus** is monotypic, containing only Lesser Rufous-headed Parrotbill *P. atrosuperciliaris* Godwin-Austen, 1877. This medium-sized (15 cm) parrotbill has a noticeably peaked crown and rather short, deep-based bill. Possible songs are a series of sharp chipping notes, rapidly repeated at varying speeds after variable but short intervals.

Sharpe (1883: 494) treated atrosuperciliaris as a synonym of *Chleuasicus ruficeps* Blyth, 1845, but Deignan (1964: 439) treated the latter as preoccupied, by secondary homonymy (International Code on Zoological Nomenclature, Art.57.2, 1999: 59), by *Paradoxornis ruficeps* Blyth, 1845. With the allocation of ruficeps to *Psittiparus*, however, the secondary homonymy is removed, but since the replacement of ruficeps by atrosuperciliaris occurred prior to 1961 (for example in Delacour 1946: 26), and since atrosuperciliaris has been in consistent use since 1961 (e.g. Deignan 1964: 439, Dickinson 2003: 624), ruficeps must be considered permanently invalid (ICZN Art.59.3). Baker (1930) assigned atrosuperciliaris, as a subspecies of ruficeps, to Suthora.

**Sinosuthora Penhallurick & Robson, 2009**
*Sinosuthora Penhallurick & Robson, 2009*. Type, by original designation, *Suthora conspicillata* A. David, 1871.

Yeung et al. (2006) in their presentation used the generic name Suthora Hodgson, 1837 for this group, and Temnoris Hodgson, 1841 for the group which we place in Suthora below. The type of *Suthora Hodgson* (1837) *Indian Review* 2: 32, is, by monotypy, *Suthora nipalensis* Hodgson, 1837. *Temnoris* Hodgson, 1841 is a new name for Suthora, with the same type species. Thus the species assigned to *Temnoris* by Yeung et al. (2006), namely fulvirofons, nipalensis, and verreauxi, should correctly be placed in *Suthora* Hodgson, 1837. This raises the question of what generic name is available for the species incorrectly placed in *Suthora* by Yeung et al., namely brunnea, webbiana, alphonsiana, conspicillata, zappeyi and przewalskii. As far as can be determined, there is no available generic or subgeneric name associated with any of these taxa. Accordingly, a new generic name is proposed:

**Sinosthora** new genus
Diagnosis: small parrotbills 11–15 cm in length. Relatively plain in coloration, with brown to rufous-chestnut-fringed wings; all lack pronounced lateral crown-stripes. Type: *Suthora conspicillata* A. David, 1871. Gender: feminine.

- **Sinosthora brunnea** (Anderson, 1871) Brown-winged Parrotbill.
  - S. b. brunnea. North-eastern Myanmar; China (west and north-west Yunnan [west of Lijiang Range and Lake Er Hai]).
  - S. b. styani (Rippon, 1903). China (north-west Yunnan [Dali Region]).
  - S. b. ricketti (Rothschild, 1922). China (south-west Sichuan [from Yalong Jiang] to north-west Yunnan [Lijiang region and area east of Lake Er Hai]).

- **Sinosthora webbiana** (Gould, 1852) Vinous-throated Parrotbill.
  - S. w. manchurica (Taczanowski, 1885). Extreme south-east Russia (south Ussuriland); China (east Heilongjiang south to north-east Hebei).
  - S. w. fulvicauda (Campbell, 1892). China (south-east Nei Monggol [north of Beijing] south to extreme north Hebei); North Korea; South Korea.
  - S. w. suffusa (Swinhoe, 1871). China (south Gansu, south Shaanxi, central and east Sichuan, east Guihuo and Guazhang, east to south Shanxi, inland south Jiangsu, Fujian and Guangdong); Vietnam (north-west part of east Tonkin).
  - S. w. webbiana. China (coastal Jiangsu and north Zhejiang).
  - S. w. elisabethae (La Touche, 1922). China (south-east Yunnan); Vietnam (north part of east Tonkin).
  - S. w. bulomacha (Swinhoe, 1866). Taiwan.

- **Sinosthora alphonsiana** (J. Verreaux, 1870) Ashy-throated Parrotbill.
  - S. a. alphonsiana. China (central and south-central Sichuan).
  - S. a. gauluensis (Li and Zhang, 1980). China (Ganluo region of south-central Sichuan).
  - S. a. stresemanni (Yen Kwokyung, 1934). China (Guizhou and adjacent south-east Sichuan).
  - S. a. yunnanensis (La Touche, 1921). China (south-east Yunnan); Vietnam (northern west Tonkin). Introduced birds in Italy (north Lombardy) may represent an undescribed race.
• Sinosuthora conspicillata (David, 1871) Spectacled Parrotbill.  
  S. c. conspicillata. China (east Qinghai, south Gansu, north-central and north-east Sichuan).  
  S. c. rocki (Bangs and Peters, 1928). China (west Hubei).

• Sinosthora zappeyi (Thayer and Bangs, 1912) Grey-hooded Parrotbill.  
  S. z. zappeyi. China (south-central Sichuan [excluding Erlang Shan]).  
  S. z. erlangshanicus (Cheng, Li and Zhang, 1983). China (south-central Sichuan [Erlang Shan]).

• Sinosthora przewalskii (Bereziowski and Bianchi, 1891) Rusty-throated Parrotbill. China (south Gansu, extreme north Sichuan).

These are relatively small, small-billed and long-tailed parrotbills with a length of 11–15 cm and weight of 6–13 g. The songs of the species that are known are similar, consisting of series of 2–5 quickly delivered, thin, high, often piercing notes, in some species preceded by weak introductory notes. As with Suthora below, they climb in a tit-like fashion, bounce between perches and frequently hang upside-down. 

Looking at the species within Sinosthora, brunnea was treated by Deignan (1964: 435) as a subspecies of webbiana; but Robson (2007: 315) pointed out that its widely accepted treatment as a separate species is supported by skeletal features of the skull (Han Lianxian 1991). Sinosthora alphonsoniana was treated as a species distinct from webbiana by Deignan (1964) and in the first and second editions of Howard and Moore (1980, 1994), but Dickinson (2003) reduced it without comment to a subspecies of webbiana. The issue here appears to concern interbreeding: hybrids have been recorded from Sichuan, in two reports from the early twentieth century, and near Sa Pa in Tonkin. However, the frequency of hybridisation needs to be considered in any zone of overlap, and where the vast majority of two taxa breed true, with only infrequent hybridisation, this can be taken as evidence that the two taxa should be considered different species (Gill 1990: 501–502). Robson (2007: 293) commented that considering the level of association between the two, hard evidence of interbreeding is surprisingly scarce. Thus the evidence in fact favours treating the two taxa as distinct species, and we follow Robson (2007: 315) in this regard.

As with alphonsoniana, the form ricketti was treated as an independent species by Deignan (1964) and in the first and second editions of the Howard and Moore (1980, 1994), but Dickinson (2003) relegated it without comment to a subspecies of P. brunnea. Dickinson may well have followed Han (1991), who merged ricketti with brunnea on the basis of feather colour, bill colour, geographical distribution and skeletal features. Robson (2007: 315) cited features of morphology in which the two taxa differ markedly but, pending further study, they are treated as conspecific here.

Suthora Hodgson, 1837


• Suthora fulvifrons (Hodgson, 1845) Fulvous Parrotbill.  
  S. f. fulvifrons. Central and east Nepal; India (Himalayas of Sikkim and north West Bengal); Bhutan.

S. f. chayulensis Kinnear, 1940. India (central Arunachal Pradesh); adjacent south-east Tibet.  
S. f. albifacies Mayr & Birckhead, 1937. North Myanmar; China (west and north-west Yunnan, and adjacent south-west Sichuan); extreme south-east Tibet.  
S. f. cyanophrys A. David, 1874. China (south Shaanxi to south-central Sichuan).

Identity of populations in west and east Arunachal Pradesh, India, not yet known.

• Suthora verreauxi Sharpe, 1883 Golden Parrotbill.  
  S. v. verreauxi. China (central Sichuan to south Shaanxi and west Hubei).  
  S. v. craddocki Bingham, 1903. Extreme east Myanmar (east of Salween R); north Laos; Vietnam (west Tonkin and north-west part of east Tonkin); China (east Guangxi, south Hunan, north Guangdong).  
  S. v. pallida La Touche, 1922. China (north Fujian).  
  S. v. morrisoniana Ogilvie-Grant, 1906. Taiwan. Identity of specimens from central Yunnan (Ailao Shan) and Guizhou, China, not yet determined.

• Suthora nipalensis Hodgson, 1837 Grey-capped Parrotbill.  
  S. n. garhwalensis (Fleming and Traylor, 1964). India (Uttarkhand).  
  S. n. nipalensis. West and central Nepal.

• Suthora humii Sharpe, 1883 Orange-eared Parrotbill. East Nepal; India (Sikkim and north West Bengal); Bhutan (east to Shemgang).

• Suthora poliotis Blyth, 1851 Grey-breasted Parrotbill.  
  S. p. poliotis. India (central and east Arunachal Pradesh, Meghalaya, south Assam, Nagaland, Manipur); west [north Chin Hills] and north Myanmar; China (west and north-west Yunnan).  
  S. p. feae Salvadori, 1889. East and south-east Myanmar; west and north-west Thailand.

• Suthora ripponi Sharpe, 1905 Buff-breasted Parrotbill.  
  S. r. patriciae Koelz, 1954. India (Mizoram).  
  S. r. ripponi. West Myanmar (south Chin Hills).

• Suthora beaulieui (Ripley, 1953) Black-eared Parrotbill.  
  S. b. beaulieui. North-east Thailand (Phu Luang); north and central Laos; Vietnam (N Annam).  
  S. b. kamoli (Eames, 2002). South Laos (east part); Vietnam (Central Highlands of C Annam).

These are small and small-billed parrotbills, with their collective length being 11.5–12.5 cm and weight 5–7 g. This group shares with the small parrotbills allocated to Sinosuthora a long graduated tail, with the outer rectrices half the length of the central ones. The bill is short and thick, slightly longer than deep, with almost straight cutting edges. The nostrils are very small, circular and completely concealed by plumules, and the legs are long in relation to body size. Like Sinosuthora, the species in Suthora climb in a tit-like fashion, bounce between perches and hang upside-down. However, the voices of Suthora differ from those of Sinosuthora. Suthora nipalensis and S. verreauxi have strange, extended, high, wheezy, buzzy and nasal songs of 2–6 notes; although they also give extremely high, thin, steadily rising secondary-type songs of 2–4 notes, which are more similar to the songs of the Sinosuthora group. These two species also utter short rattlets and quite harsh, low, slightly
sputtering calls, as well as scolding squeaky nasal calls. Sharpe (1883) assigned fulvicronus to Chlorisaurus, but Hartert (1907) and Baker (1930) assigned it to Suthora. All three assigned nipalensis to Suthora, as did Sharpe in the case of verreauxi.

Deignan (1964) treated verreauxi as a subspecies of nipalensis, but Dickinson (2003: 623) split these taxa and Yeung et al. (2006: 688) indicated their paraphyletic relationship. Other evidence in Yeung et al. (2006) strongly suggests at least two species within the Black-throated Parrotilbill P. nipalensis as arranged above: nominate nipalensis, which forms a sister clade with verreauxi; and poliotis, which forms a sister clade with ripponi. This split between S. nipalensis and S. poliotis was previously recognised by Baker (1930), who included humii, foae and ripponi in his S. poliotis. Furthermore, Yeung et al. (2006: 88) stated: ‘the deep divergence between subspecies of P. nipalensis implies their taxonomic re-ranking to species status’. Robson (2007: 293) developed this point:

The Black-throated Parrotilbill currently comprises a group of ten highly distinctive subspecies. Modern taxonomists would argue that these represent more than one species, and a simple division according to basic plumage differences would support the following five sibling species: the ‘Grey-capped Parrotilbill’, consisting of the nominate race and subspecies garwavalensis; the ‘Orange-eared Parrotilbill’, currently race humii; the ‘Grey-breasted Parrotilbill’, made up from races poliotis and foae; the ‘Buff-breasted Parrotilbill’, containing the taxa ripponi and patricia; and the ‘Black-eared Parrotilbill’, represented by the current races beaulieui and kamoli.

The plumage features and vocal differences of these various taxa are described in detail in Robson (2007: 317).

According to Robson (2007: 317), the form crocota Kinnear, 1954, is currently best treated as a semi-stable hybrid population between S. humii and S. poliotis.

Neosuthora Hellmayr, 1911

Neosuthora Hellmayr, 1911, in Wytsman, Genera Avium Pt. 18: 74. Type, by original designation, Suthora davidiana Slater, 1897.

• Neosuthora davidiana (Slater, 1897) Short-tailed Parrotilbill.

N. d. davidiana. China (south Zhejiang, north Fujian).

N. d. thompsoni (Bingham, 1903). East Myanmar; Thailand (south-east of north-west and adjacent north-east); north Laos; Vietnam (north part of west Tonkin).

N. d. tonkinensis (Delacour, 1927). Laos (extreme east part of north-east and east-central part); Vietnam (east Tonkin, north Annam). Specimens from south Hunan and north Guangdong, China have not been assigned to a race.

This small species (9.5–10 cm, 8.5 g) has a jizz like that of a munia Lonchura ( Estrildidae ). Its song is also very distinctive, being a very thin, high-pitched rapid ascending series of 6–9 notes.

ACKNOWLEDGEMENTS

This study benefited from the contributions of Carol K. L. Yeung, Lei Fu-ming, Yang Xiao-jun, Han Lian-xian, Lin Mei-Chu and Li Shou-Hsien, to all of whom we record our deepest thanks. We also thank Nigel Collar for spending many hours editing the manuscript, and his helpful comments.

REFERENCES


