Systematic notes on Asian birds. 28. Taxonomic comments on some south and south-east Asian members of the family Nectariniidae

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Certain taxonomic changes made by Cheke & Mann (2001) are here explained and justified. *Dicaeum haematostictum* Sharpe, 1876, is split from *D. australe* (Hermann, 1783). *D. aeruginosum* Bourns & Worcester, 1894 is merged into *D. agile* (Tickell, 1833). The genus *Chalcoparia* Cabanis, 1851, is re-established for (*Motacilla*) *singalensis* Gmelin, 1788. The taxon *Leptocoma sperata marinduquensis* (duPont, 1971), is shown to be based on a specimen of *Aethopyga siparaja magnifica* Sharpe, 1876. *Aethopyga vigorsii* (Sykes, 1832) is split from *A. siparaja* (Raffles, 1822). Cheke & Mann (op. cit.) mistakenly omitted two forms, *Anthreptes malacensis erixanthus* Oberholser, 1932 and *Arachnothera longirostra zarhina* Oberholser, 1912. Five subspecies are removed from *Aethopyga shelleyi* Sharpe, 1876 to create the polytypic *A. bella*, Tweeddale, 1877. The *Arachnothera affinis* (Horsfield, 1822)/*modesta* (Eyton, 1839)/*everetti* (Sharpe, 1893) complex is re-evaluated in the light of the revision by Davison in Smythies (1999).

Introduction

In a recent publication (Cheke & Mann, 2001) some taxonomic changes were made to members of this family occurring in Asia. These include the re-establishment of a monotypic genus, the re-assessment of a subspecies, the lumping of two species into one, and the splitting of two species. This paper further justifies these changes and the splitting of another species. The species concept applied in this paper and in Cheke & Mann (op. cit.) approaches that of the Evolutionary Species Concept (Mayden, 1997) and the General Lineage Species Concept (de Queiroz, 1999) as much as the Biological Species Concept. The opportunity is taken to make corrections and amendments to Cheke & Mann (op. cit.).

This paper follows Sibley & Monroe (1990), as did Cheke & Mann (op. cit.) in including the flowerpeckers as a tribe (Dicaeini) within the subfamily Nectariniinae of the family Nectariniidae.

Dicaeum australe (Hermann, 1783)

Salomonsen (1967) included *haematostictum* Sharpe, 1876 in this Philippine endemic species, presumably following Salomonsen (1960). Brooks et al. (1992), Collar et al. (1999), BirdLife International (2001) and Cheke & Mann (2001) split the two forms into separate species with little or no explanation for the move. The two forms are allopatric. However, difference in bill shape, as well as rather striking plumage differences, would suggest that the two forms are better considered separate monotypic

species, closest to *D. retrocinctum* Gould, 1872. Both are sexually monomorphic. Important differences are tabulated below:

	australe	haematostictum	
ADULT			
throat and upper breast	grey	white	
bar cross upper breast	absent	thick; black	
centre of breast	grey; narrow red stripe	broad red patch edged black	
abdomen	grey; narrow red stripe	whitish; narrow red stripe	
flanks	grey	pale grey	
bill	broader, deeper, less curved	narrow, thin, markedly curved,	
		tending towards D. retrocinctum	
JUVENILE			
abdomen and flanks	grey	buff-grey	

Although there is no difference in bill length between the two taxa, the shape and proportions of the bill of *D. haematostictum* give it a longer appearance. The following arrangement is proposed:

Dicaeum australe (Hermann, 1783)

Monotypic: includes *D. papuensis* (Gmelin, 1789), *flaviventer* Meyer, 1894 and *rubriventer* Lesson, 1831. Occurs in the Philippines on Basiao, Basilan, Biliran, Bohol, Burias, Cabo, Calicoan, Camiguin North, Camotes, Catanduanes, Cebu, Dinagat, Leyte, Lubang, Luzon, Marinduque, Maripipi, Masbate, Mindanao, Naranjos, Samar, Sarangani, Siargao, Ticao and Verde.

A suitable English name would be red-striped flowerpecker¹.

Dicaeum haematostictum Sharpe, 1876

Monotypic: includes *D. whiteheadi* Hachisuka, 1926. Occurs in the Philippines on Guimaras (?extinct), Negros and Panay.

A suitable English name would be black-belted flowerpecker.

Material²: *D. australe*: 88.7.12.48; 96.6.6.521-524, 530; 97.12.11.3; 1977.16.132-133; *D. haematostictum*: 76.8.28.47-48; 96.6.6.517-518, 520; 97.5.13.442; 98.1.11.18; *D. retrocinctum*: 81.2.18.3; 95.6.13.8; 96.6.6.512; 1969.29.356.

 $^{^{1}}$ This name is preferred to red-keeled flower pecker which has been used to include $\it haematostictum$ and might therefore be confusing.

² Specimen numbers are those of the Natural History Museum, Tring (previously British Museum Natural History) unless otherwise stated; * indicates spirit specimens; AMNH = American Museum of Natural History; DMNH = Delaware Museum of Natural History.

The Dicaeum agile complex

The taxa considered here are rather dull flowerpeckers, brown or olive above, whitish, creamy or yellowish below, with or without streaking; white patches or tips to rectrices present or absent; bill of variable thickness. Most recent works, including Salomonsen (1960), Salomonsen (1967), van Marle & Voous (1988) and Dickinson et al. (1991) have considered the group to consist of three species, D. agile (Tickell, 1833), everetti (Sharpe, 1877) and aeruginosum (Bourns & Worcester, 1894). Sheldon (1985), however, suggested that there is no justification for the Philippine taxa remaining separate. Bill thickness varies from thin (D. a. finschi Bartels, 1914) through medium thick (e.g. D. a. tinctum (Mayr, 1944)) to very thick (e.g. D. a. aeruginosum); colour of dorsum is various shades of grey (D. a. pallescens (Riley, 1935)), brown (D. e. everetti), olive (finschi) or green (tinctum); whitish patches on undersides of outer one or two pairs of rectrices vary from absent (everetti), through slight (D. e. bungurense (Chasen, 1934)), small and bright (D. a. affine (Zimmer, 1918), to large but faint (D. a. striatissimum Parkes, 1962) and large and bright (D. agile); ventral streaking varies from none (everetti, D. a. obsoletum Müller, 1843) through moderate (finschi, D. a. atjehense Delacour, 1946) to heavy (pallescens) to very heavy (striatissimum). The mosaic distribution of these character states through the different forms clouds the picture. If not for the fact that everetti and D. e. sordidum (Robinson & Kloss, 1918) are to some extent sympatric with D. a. modestum (Hume, 1875), a case could be made for lumping all forms in one species. As there is no sympatry between the Philippine forms (aeruginosum, striatissimum, affine), previously D. aeruginosum, and the forms generally considered as constituting *D. agile*, it was considered reasonable to lump these.

Subspecies accepted, following Salomonsen (1960) and Salomonsen (1967), arranged alphabetically within the species accepted by these authors:

- *D. agile agile* (Tickell, 1833). Indian Peninsula, north Burma. Grey-brown above with faint olive tinge; buff below with faint streaking; large white tips on underside of outer rectrices, narrow white tips to next pair; bill thick.
- *D. a. atjehense* Delacour, 1946 *nom. nov.* for *D. a. sumatranum* (Chasen, 1939). Sumatra. May be synonymous with *modestum*, with similar tail spots, but general colour is more like *finschi*.
- *D. a. finschi* Bartels, 1914. Java. Mostly olive above; grey-white moderately streaked below; very narrow white edging to some rectrices; bill thin.
- *D. a. modestum* (Hume, 1875). Malay Peninsula and Borneo. Greener above than nominate; yellower and more heavily streaked below; much thinner bill. (Includes *D. a. remotum* (Robinson & Kloss, 1915), *D. a. deignani* Ripley, 1952, and *D. a. separabile* Deignan, 1956).
- *D. a. obsoletum* (S. Müller, 1843). Timor. Grey-olive above, but less olive than nominate; browner on rump; almost pure white below, unstreaked; large faint white tips to some rectrices; stout bill.
- *D. a. pallescens* (Riley, 1935). Bangladesh, Burma, Thailand, except peninsula, and Vietnam. Much greyer above and more heavily streaked below than nominate, and bill less deep.
 - D. a. tinctum (Mayr, 1944). Sumba, Flores and Alor. Olive-brown above, greener

than nominate; faintly streaked, creamy underparts, less obvious than nominate; below; faint pale tips to underside of rectrices; bill of medium thickness.

- *D. a. zeylonicum* (Whistler, 1944). Sri Lanka. Darker, more olive-grey above; rump more olive; less yellow, more heavily streaked below.
- D. aeruginosum aeruginosum (Bourns & Worcester, 1894). Cebu (?extinct), Mindanao, Mindoro and Negros. Olive-green above, green on lower back, rump and uppertail coverts; below whitish, heavily streaked brown, especially on breast; faint whitish patches on underside of outer rectrices, which are edged and tipped greyish; bill stout. (The population on Mindoro is somewhat intermediate between aeruginosum and striatissimum).
- *D. a. affine* (Zimmer, 1918). Palawan. Upperparts more grey-olive than *aeruginosum* and *striatissimum*, with broader bright olivaceous edging; below paler, more narrowly and obscurely streaked; spots on outer rectrices brighter, smaller and more sharply defined; bill shorter, broader and more obtuse; size smaller.
- *D. a. striatissimum* Parkes, 1962. Lubang, Luzon, Romblon, Sibuyan and Catanduanes. Upperparts darker, browner or sootier, less greenish than *aeruginosum*; underparts more heavily and extensively streaked; whitish patches on underside of outer rectrices larger and fainter.
- *D. everetti bungurense* (Chasen, 1934). Bunguran Island, North Natunas. Larger than nominate; darker above and greyer below, with marked streaking on throat, breast and centre of belly; rectrices have the slightest pale tips; bill thick.
- *D. e. everetti* (Sharpe, 1877). Riau Archipelago and Borneo. Brown to olive-brown above; grey-brown below, centre of throat to belly white; olive edging to remiges and rectrices; bill thick.
- *D. e. sordidum* (Robinson & Kloss, 1918). Selangor, Malay Peninsula. Cheke & Mann (op. cit.) synonymised this form with the nominate, but further examination of material suggested that this was perhaps in error. It differs from the nominate in being less pure brown above, and similar to *bungurense* in having very slight streaking below, and lacking olive edging to rectrices; bill thick.

The suggested arrangement is as follows:

Dicaeum agile:

D. a. agile (Tickell, 1833)

D. a. zeylonicum (Whistler, 1944)

D. a. modestum (Hume, 1875)

D. a. pallescens Riley, 1952

D. a. atjehense Delacour, 1946

D. a. finschi Bartels, 1914

D. a. tinctum (Mayr, 1944)

D. a. obsoletum (Müller, 1843)

D. a. aeruginosum (Bourns & Worcester, 1894)

D. a. striatissimum Parkes, 1962

D. a. affine (Zimmer, 1918)

Dicaeum everetti:

D. e. everetti (Sharpe, 1877)

D. e. sordidum (Robinson & Kloss, 1918)

[D. e. bungurense (Chasen, 1934). This form, known only from the type, is rather problematical, as it is somewhat intermediate in characters between D. everetti and D. agile.].

Material: D. a. agile: 87.2.1.435, 443, 444; 1938.7.15.660; 1949.25.3553; 1949.WHI.1.17446, 17450-17452; D. a. zeylonicum: 88.7.12.163; 1916.9.20.582-583; 1931.11.2.12; 1940.12.3.306-308, 315, 487-488, 732; D. a. deignani: 82.1.20.1364-1366; 87.2.1.399, 400, 402, 403, 409-412, 426; 1955.1.4016; D. a. tinctum: 73.5.12.1031; 95.5.1.2157; 98.12.7.12-13; 1969.29.352-353.; 98.12.5.56; D. a. obsoletum: 73.5.12.1032; D. a. pallescens: 1916.12.27.1034, 1035, 1039, 1040, 1042; 1955.1.4019; 1927.6.5.1513 (separabile); D. a. modestum: 47.3.18.15; 87.2.1.404-408, 413; 1916.12.27.1036; 1936.4.12.2512-2313; 1948.80.2577-2579; D. a. finschi: 1927.4.18.720; D. a. aeruginosum: 96.6.6.564; D. e. everetti: 77.9.27.33; 1901.1.31.27; D. e. bungurense: 1947.60.65.

The Genus Chalcoparia Cabanis, 1851

The genus Chalcoparia was named in 1851 by Cabanis to accommodate a single species Motacilla singalensis Gmelin, 1788, from Malacca, Malay Peninsula (in errore Ceylon, hence the specific name). Chalcoparia was not accepted by Rand (1967) who placed the species in Anthreptes Swainson, 1832, presumably due to some superficial resemblances to Asian members of that genus. That is where it remained, its position uncontested, until Cheke & Mann (op. cit.) resurrected the genus for this species, for which they accepted 12 subspecies. This move was based primarily on tongue structure. Whereas all members of Anthreptes examined were found to have a tubular tongue, as do all other sunbird genera, including the aberrant Hypogramma Reichenbach, 1853, and spiderhunters, C. singalensis has a rectangular horny plate, concave in cross-section, with the distal end deeply notched and fimbriated, with the edges also fimbriated. This is assumed to be a primitive character state, whereas a tubular tongue is assumed to be derived. In structure the tongue comes closer to some Prionochilus Strickland, 1841, flowerpeckers. Nectar has been recorded as a food source, but it is presumably taken from shallow flowers, or by nectar robbery, and the species may be no more than an opportunistic nectarivore. Unlike all other sunbirds, the lower mandible is not serrated. Behaviour of the species is more like that of a small babbler or white-eye.

Material: Prionochilus maculatus (Temminck & Laugier, 1836): A/1976.33.191-193*; P. thoracicus (Temminck & Laugier, 1836): A/1970.11.30-34*; Dicaeum trigonostigma (Scopoli, 1786): A/1970.19.8-13*; D. hirundinaceum (Shaw & Nodder, 1792): 1965.42.53-56*; Chalcoparia singalensis: 1940.12.8.178*; A/1976.33.200*; A/1977.17.21*; Deleornis fraseri (Jardine & Selby, 1843): 1932.12.4.12*; D. axillaries (Reichenow, 1893): A/1975.14.162-164*; Anthreptes simplex (Müller, 1843): 1968.8.19*; A/1976.33.194*; A. malacensis (Scopoli, 1786): A/1976.33.195-199*; A. longuemarei (Lesson, 1831): 1968.42-46*; Hedydipna collaris (Vieillot, 1819): 1934.12.12.10*; A/1975.14.165-166*; H. platura (Vieillot, 1819): 1929.2.18.536*; Hypogramma hypogrammicum Müller, 1843: 1967.37.56-57*; A/1976.33.201*; Anthobaphes violacea (Linnaeus, 1766): A/1985.10.149, 151, 184, 185*; Cyanomitra verticalis (Latham, 1790): A/1987.2.6-10*; C. cyanolaema (Jardine & Fraser, 1851): 1932.12.4.15*; C. obscura (Jardine, 1843): A/1975.14.167-170*; Chalcomitra adelbert (Gervais, 1834): 1932.2.9.10*.C. fuliginosa (Shaw, 1811-12): A/1975.24.14.1*; C. rubescens (Vieillot, 1819): 1928.8.5.65*; C. amethystina (Shaw, 1811-12): 1932.11.24*; C. senegalensis (Linnaeus, 1766): 1928.8.3.28*; Leptocoma zeylonica (Linnaeus, 1766): 1968.3.1-7*; L. sperata (Linnaeus, 1766):

A/1976.33.202*; L. sericea (Lesson, 1827): 1940.12.8.254*; L. calcostetha (Jardine, 1843): A/1976.33.203-204*; Nectarinia kilimensis Shelley, 1884: 1957.35.773*; N. famosa (Linnaeus, 1766): A/OH/52-53*; A/1985.10.145*; Drepanorhynchus reichenowi (Fischer, 1884): A/1969.46.3*; A/OH/105-106*; Cinnyris chalybeus (Linnaeus, 1766): A/1989.10.61-62*; 1957.35.780*; C. regius Reichenow, 1893: A/OH/125, 182*; C. venustus (Shaw & Nodder, 1799): 1957.35.779*; C. asiaticus (Latham, 1790): A/1981.26.5-12*; C. jugularis (Linnaeus, 1766): A/1976.33.205*; C. sovimanga (Gmelin, 1788): A/1995.22.1-3*; Aethopyga nipalensis (Hodgson, 1837): A/1969.16.11-12*; A. saturata (Hodgson, 1837): A/2000.8.62-63*; A. siparaja (Raffles, 1822): A/1976.33.206-207*; Arachnothera longirostra (Latham, 1790): A/1976.33.208-211*; A. robusta Müller & Schlegel, 1845: A/1970.11.36-37*; A. affinis (Horsfield, 1822): A/1977.17.26*; A. magna (Hodgson, 1837): 1928.6.26.45*.

Anthreptes malacensis erixanthus Oberholser, 1932

Cheke & Mann (op. cit.) omitted to include the Natuna Islands as part of the range of the Plain-throated Sunbird *Anthreptes malacensis* (Scopoli, 1786). Oberholser (1932) named the form from these islands as *erixanthus*. No material has been seen, and hence no comment can be made on its validity.

Leptocoma sperata marinduquensis (duPont, 1971)

The name *Nectarinia sperata marinduquensis* was used by duPont (1971) for a single female specimen collected on Marinduque, the Philippines. A request for specimens of this form from Delaware Museum resulted in two specimens (male and female), with AMNH numbers, from Marinduque being sent to the Natural History Museum, Tring. These specimens differed in no way from typical nominate *sperata* (Linnaeus, 1766). A request for the type of *marinduquensis* resulted in some good quality electronic photographs. On examination these appeared to be of a female *Aethopyga siparaja magnifica* Sharpe, 1876, matching skins of that taxon in all important characters. Therefore the type of *Nectarinia sperata marinduquensis* duPont, 1971, is in fact *Aethopyga siparaja magnifica* Sharpe, 1876, and the former name becomes a junior synonym of the latter.

Material: *Leptocoma sperata sperata*: 53.5.4.12; 88.7.1.229, 241, 243, 248, 256, 257; 96.1.18.15; 97.5.13.95, 145, 341; AMNH 687305, 687306 (both from Delaware Museum, and both labelled *marinduquensis*); *L. s. juliae* (Tweeddale, 1877): 80.11.18.66; 88.7.1.262, 266, 267; 95.11.19.44; 1932.6.2.23; *Aethopyga siparaja magnifica*: 88.7.1.89-91, 93; 97.5.13.440; 98.1.11.28; electronic photographs of the type of *Nectarinia sperata marinduquensis* (DMNH 4400) from Delaware Museum.

Aethopyga shelleyi Sharpe, 1876

Cheke & Mann (op. cit.) were remiss in not giving sufficient consideration to the splitting off and raising to specific level one of the six subspecies accepted in this species. This can be partly excused by publishing deadline pressures leaving too little time to fully address the problem. In that work this Philippines endemic species was considered to consist of the subspecies *bella* Tweeddale, 1877, *flavipectus* Ogilvie-Grant, 1894, *arolasi* Bourns & Worcester, 1894, *bonita* Bourns & Worcester, 1894 and *rubrinota* McGregor, 1905, as well as the nominate *shelleyi*. It has now become clear that the nominate, occurring on Balabac, Palawan, Calion and Busuanga, is sufficiently distinct to warrant separation at the specific level from the other more homogeneous forms.

The following are considered the important differentiating characters between *shelleyi* and the other forms (based chiefly on *bella*):

	male shelleyi	male <i>bella</i>	
fore/mid crown	blue-purple iridescent	green iridescent	
		(flavipectus – mid crown as hind crown)	
hind crown	blue-purple iridescent	dark olive-green	
nape	crimson	dark olive-green	
lower back	crimson	yellow	
sides of throat	crimson	narrow crimson border	
malar stripe aural patch	broad; blue-purple iridescent absent	narrow; purple & green iridescent purple iridescent	
throat/breast	dull yellow; red streaks	bright yellow; few, or no red streaks (arolasi - more orange-red streaking on breast; bonita - breast heavily streaked red; flavipectus/rubrinota - little or no red on breast; minuta - no red streaking on breast)	
abdomen	dull yellow, flanks whiter	white, creamy towards mid line (yellower in <i>arolasi</i>)	
wing length	46-50 mm	40-45 mm	
bill to skull	15.0-18.1 mm (mean 16.4 mm)	13.8-15.2 mm (mean 14.5 mm)	
	female shelleyi	female bella	
rump	dull green-olive (concolorous	yellow (back green-olive)	
	with back)		
wing length	43-45 mm	41 mm	
bill to skull	13.3-16.6 mm (mean 15.3 mm)	12.7, 14.1, 14.3 mm	

The following arrangement is proposed:

Aethopyga shelleyi Sharpe, 1876. Monotypic. Occurs in Palawan, Balabac, Culion and Busuanga.

A suitable English name for this species would be lovely sunbird.

Aethopyga bella: Polytypic, consisting of the following subspecies in alphabetical order:

- A. b. arolasi Bourns & Worcester, 1894. Sulu Archipelago.
- A. b. bella Tweeddale, 1877. Samar, Leyte and Mindanao.
- A. b. bonita Bourns & Worcester, 1894. Ticao, Masbate, Panay, Negros and Cebu.
- A. b. flavipectus Ogilvie-Grant, 1894. Luzon, Mindoro and Polillo.
- A. b. rubrinota McGregor, 1905. Lubang.

A suitable English name for this species would be handsome sunbird.

Material: *Aethopyga shelleyi*: 76.8.28.44; 88.7.1.115-117; 94.8.6.63-65, 72, 73; 1911.11.16.307-315; 95.5.1.2319, 2428; 96.6.6.469-471; 1969.29.406; *A. b. bella*: 88.7.1.119-121; 96.6.6.467, 468; 97.5.13.564; 1977.16.131; *A. b. rubrinota*: 1909.8.3.15, 16.

Aethopyga siparaja (Raffles, 1822)

Whilst studying skins for the monograph on the Nectariniidae (Cheke & Mann, op. cit.) it became obvious that a case could be made for separating the westernmost subspecies *vigorsii* (Sykes, 1832) of the Western Ghats of India, at the specific level from the other subspecies of *siparaja*. It is geographically disjunct, the closest form geographically being *seheriae* (Tickell, 1833) which approaches no closer than Bihar, or possibly the hills of northeastern Deccan.

The following are considered the important differentiating characters between *vigorsii* and the other 15 forms. Skins of six subspecies, *beccari* Salvadori, 1875, *labecula* (Horsfield, 1840)³, *natunae* Chasen, 1934, *nicobarica* (Hume, 1873), *owstoni* Rothschild, 1910, and *trangensis* Meyer de Schauensee, 1946, were not available for examination, and for these descriptions in the literature were utilised.

	male <i>vigorsii</i>	male, other forms	
fore/mid crown	green-blue iridescent	green, or violet-purple, or purple-	
		blue, or blackish-blue iridescent	
hind crown	dark brown	olive-brown, or crimson	
aural spot	violet iridescent	absent	
throat/breast	crimson; much fine	scarlet, with or without fine	
	yellow streaking	yellow streaking	
uppertail coverts	blue-green iridescent	purple, or green, or green and	
		purple iridescent	
collar on upper breast	blackish	absent	
wing length	61-65 mm	49-61 mm	
bill to skull	23-27 mm	20-23 mm	
	female vigorsii	female, other forms	
underparts	grey/olive-grey	olive/yellowish-olive	
wing	54-57 mm	47-53 mm	
bill to skull	21-24 mm	19-21 mm	

The following arrangement is proposed:

Aethopyga vigorsii (Sykes, 1832). Monotypic. Occurs in the Western Ghats and Nilgiris, India.

A suitable English name for this species would be western crimson sunbird.

Aethopyga siparaja: polytypic, consisting of the following subspecies listed in alphabetical order:

- A. s. beccari Salvadori, 1875. Sulawesi, except north, Butung, Muna and Kabaena.
- A. s. cara Hume, 1874. Southern Burma and Thailand.
- A. s. flavostriata (Wallace, 1865). Northern Sulawesi.

³ This name does not appear in Rand (1967). In the 1839 volume of the PZS the relevant article appeared in 1840, see Duncan (1937, Proc. Zool. Soc.: 71-83). Ed.

- A. s. heliogona Oberholser, 1923. Java.
- A. s. insularis Delacour & Jabouille, 1928. Phucoq Island, Cambodia.
- A. s. labecula (Horsfield, 1840). Eastern Himalayas south to Chittagong.
- A. s. magnifica Sharpe, 1876. Philippines, on Cebu, Marinduque, Negros, Panay, Sibuyan and Tablas.
- A. s. mangini Delacour & Jabouille, 1924. Southeast Thailand, central and southern Indochina.
 - A. s. natunae Chasen, 1934. Natuna Islands.
 - A. s. nicobarica Hume, 1873. Nicobars.
 - A. s. owstoni Rothschild, 1910. Naochow Island, south China.
- A. s. seheriae (Tickell, 1833). Himalayan foothills east to Sikkim, to eastern Bihar, north Bengal, western Bangladesh, central Burma, to south Yunnan and west Tonkin and northwest Thailand.
 - A. s. siparaja (Raffles, 1822). Malay Peninsula, Sumatra and Borneo.
 - A. s. tonkinensis Hartert, 1917. Northeast Vietnam and southeast Yunnan.
- A. s. trangensis Meyer de Schauensee, 1946. South Thailand and Malay Peninsula north of nominate.

A suitable English name for this species would be eastern crimson sunbird.

Material: Aethopyga vigorsii: 153a; 86.11.1.131, 133, 137-140, 144, 151; 88.7.1.44, 48, 49, 51, 55, 56; 97.12.10.945; 98.12.12.502; 1925.12.23.1040, 1068, 1069; A. siparaja siparaja: 61.1.2.3; 86.12.1.251; 88.7.1.78-80; 94.7.5.78; 95.5.1.2.309; 1908.12.16.145; 1936.4.12.2311; A. s. cara: 86.12.1.234, 246; 1936.4.12.2310, 2321; 1955.1.3851, 3855; A. s. flavostriata: 60.9.6.39; 73.5.12.819; 81.5.1.1358; 88.7.1.83, 84; A. s. heliogona: 81.5.1.1362; A. s. insularis: 1928.6.26.1546; A. s. magnifica: 88.7.1.89-91, 93; 97.5.13.440; 98.1.11.28; A. s. magnini: 1927.6.5.1469; 1928.6.26.1540, 1542, 1554, 1557; 1930.7.16.287; 1936.4.12.2312; A. s. seheriae: 80.11.1.193; 86.11.1.195; 86.12.1.173, 178, 189; 1937.11.17.842, 867; A. s. tonkinensis: 1919.12.20.506; 1923.3.10.51, 79; 1927.6.5.1463, 1466, 1467; 1935.10.23.632.

Arachnothera longirostra (Latham, 1790)

Cheke & Mann (op. cit.) omitted *A. l. zarhina* Oberholser, 1912, from Banjak Island, Sumatra. This should be added to the subspecies subsumed within *A. l. cinereicollis* (Vieillot, 1819), following Rand (1967), although van Marle & Voous (1988) accepted it as a valid subspecies.

Arachnothera affinis (Horsfield, 1822)/modesta (Eyton, 1839)/everetti (Sharpe, 1893) complex

Following Smythies (1999) the following arrangement was adopted in Cheke & Mann (op. cit.), except that *pars* Riley, 1939 was not merged with *everetti* (Sharpe, 1893). Further consideration of this problem after consulting Davison (2000) has led the author to believe that *pars* is synonymous *everetti*. The suggested arrangement is therefore as follows.

Arachnothera modesta: polytypic, which includes the following subspecies in alphabetical order:

A. m. caena Deignan, 1956. Southern Burma, Thailand.

A. m. concolor Snellemann, 1887. Sumatra.

A. m. modesta (Eyton, 1839). Thailand south of Kra, peninsular Malaysia, Borneo.

Arachnothera affinis: consists of two subspecies:

A. a. affinis (Horsfield, 1822). Java, Bali.

A. a. everetti (Sharpe, 1893) (includes pars Riley, 1939). Borneo.

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