

Name-bearing types of subspecies of *Sylvia curruca* (L.) and *S. althaea* Hume in the collection of the Zoological Institute, St.Petersburg (Aves: Sylviidae)

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Type specimens of five subspecies of *Sylvia curruca* (*S. c. halimodendri*, *S. c. telengitica*, *S. c. snigirewskii*, *S. c. jaxartica*, and *S. c. chuancheica*) and of *S. althaea monticola* are examined. Lectotypes are designated for *S. curruca halimodendri* Sushkin, 1904 and *S. c. telengitica* Sushkin, 1925. Data on all type specimens are refined and supplemented, including their labels and external morphology (plumage coloration, dimensions, and wing formula). Brief history of investigation of geographical variation in *S. curruca* and *S. althaea* is presented. The subspecies status of the Turkmenian Lesser Whitethroat (*S. c. snigirewskii* Stachanow, 1929) is confirmed. It is found that the holotype of this subspecies is kept in the Zoological Institute, St.Petersburg rather than in the Zoological Museum of the Moscow University, where two paratypes are preserved. New data confirming that *S. c. chuancheica* Portenko, 1955 is a junior synonym of *S. c. margelanica* Stolzmann, 1899 are presented.

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Introduction

Among widely distributed Palearctic Warblers of the genus *Sylvia*, the identification of taxa forming the superspecies *S. curruca* – *S. althaea* presents considerable difficulties. The main features of the geographic variation in size and plumage coloration of the Lesser Whitethroat (*S. curruca*) and Mountain Whitethroat (*S. althaea*) were described by Hume (1873, 1878), who had examined 116 skins of Indian birds collected chiefly in the winter time. Among them, Hume distinguished the small “*minula*”, with the lightest upper parts, “mantle pale sandy brown” and “crown pale bluish grey”, and also with a blunt wing top (2 = 7, sometimes 8) (Hume, 1873, 1878), the large “*althaea*” having “upper surface darkish grey, slightly tinged with brown on the back” (Hume, 1878), and also the form “*affinis*”, close in plumage coloration to the European “*curruca*”, but with “larger and stouter bill”. The latter form was assigned erroneously to *Sylvia affinis* Blyth, 1845 in the second article by Hume (1878: 60); subsequently Ticehurst & Whistler (1933) have established the name *S.*

curruca blythi for these birds. Most of the birds corresponded to the published diagnoses, but there existed also individuals with intermediate traits integrating the samples in a single row. Hume (1878) has emphasized the reality of differences between the described forms and the difficulty in the assigning them to one or three different species. Despite large new skin material and data on life history of these Warblers collected in the past 120 years, the discussion on the taxonomy of the group is continuing also at present. As before, the opinions of taxonomists differ widely on the number of species (1-3), their scope, number of subspecies (7-12), and especially on the distribution of subspecies. A vast literature dealt with these problems; the main nomenclatural and taxonomic inferences were published in reviews and manuals in the last 40 years (Vaurie, 1959; Portenko, 1960; Williamson, 1968; Korelov, 1972; Ali & Ripley, 1973; Stepanyan, 1978, 1983, 1990; Wolters, 1980; Étchécopar & Hüe, 1983; Watson, 1986; Cheng, 1987; Haffer, 1991; Roselaar, 1992; Baker, 1997).

Collections of the Zoological Institute, St.Petersburg (ZISP) were of special importance in

the study of the geographical variation in this group. Pleske (1889) has made the first revision of them, based on the analysis of 69 specimens, and accepted the species status of *S. curruca*, *S. althaea* and *S. minula* (= *minuscula*). Later on, large material was collected by N. Severtsov, N. Przewalski, P. Kozlov and P. Sushkin mainly in the southern part of W Siberia, Altai Mts., Sayan Mts., and Middle and Central Asia; the collection of M. Menzbier was received also. In the mid-twenties of 20th century, the collection of skins of *S. curruca* of ZISP became the world's largest. Snigirewski (1929), whose investigation of the geographical variation of the species was among the most extensive, used already about 600 skins from this collection. In his opinion, the polytypic species *S. curruca* comprised 8 subspecies (*S. c. curruca*, *S. c. telengitica*, *S. c. caucasica*, *S. c. halimodendri*, *S. c. minula*, *S. c. jaxartica*, *S. c. margelanica*, and *S. c. turkmenica*) and the morph *affinis* (= *S. curruca blythi* Ticehurst & Whistler, 1933). Snigirewski regarded *S. althaea* Hume, 1878 as a separate species and did not assign to it the Caucasian birds (*Sylvia caucasica* Ognev & Bankovski, 1910). He considered the latter to be a subspecies of *S. curruca*, stressing much smaller size of their bill as compared with *S. althaea*.

The next revision of the ZISP material (more than 700 specimens) was carried out by Portenko (1960). Adopting a very wide interpretation of the polytypic species, he assigned to *S. curruca* 10 subspecies, six of them (*S. c. curruca*, *S. c. caucasica*, *S. c. althaea*, *S. c. jaxartica*, *S. c. halimodendri* and *S. c. telengitica*) nesting in the territory of Mongolia and the former USSR and one more (*S. c. margelanica*) probably nesting in the Pamiro-Alai. The other subspecies of Lesser Whitethroat recognized by Portenko (1955) were *S. c. minula*, *S. c. chuancheica* and *S. c. monticola*.

As a result of description of new forms by Sushkin (1904, 1925), Snigirewski (1927, 1929) and Portenko (1955), holotypes or syntype series of six taxa of the superspecies *S. curruca* – *S. althaea* are kept in the collection of ZISP. The interest in the taxonomic analysis of geographical variation in these Warblers increased considerably in the recent years. Because most of original descriptions are brief and sometimes inexact (for instance, the dimensions of birds were given by Snigirewski and Portenko without regard for sex differences), it becomes necessary to describe the type specimens in detail.

Material and methods

Type series of six taxa belonging to the superspecies *S. curruca* – *S. althaea* were examined.

The text of original labels is given in quotation marks; the additions concerning the birds age, locality and date of collecting are presented in square brackets.

All standard measurements (length of wing, tail, tarsus, and bill) were carried out using a dial calliper with 0.1 mm precision. Bill from feathers is the length of culmen from the base of the foremost feathers of the forehead; width and depth of bill were measured at the level of the front edge of the nares.

The following abbreviations are used in the descriptions of plumage and age classes: juv. – juveniles, birds in juvenile plumage; 1w – birds in first winter (fresh) plumage after post-juvenile moult; 1s – birds in first summer (worn) plumage; ad – adults, birds after the first complete moult; Al – alula feathers 1-3; P – primaries 1-10, numbered from the outermost (P1); PC – primary coverts; R – rectrices 1-6, numbered from the central pair (R1).

Sylvia curruca halimodendri Sushkin, 1904 – Kazakhstanian Lesser Whitethroat

Sushkin (1904) has described this subspecies very briefly from six specimens collected by him in sands at the lower Irghiz and lower Turgai Rivers. A more detailed diagnosis of the subspecies including the differences from *S. c. curruca*, *S. c. minula* (as *S. minuscula* or *S. c. minuscula*) and *S. margelanica* Stolzmann, 1897, as well as additional data on distribution and life history were given in another article (Sushkin, 1908).

A revised and supplemented description of type specimens of *S. c. halimodendri* is presented here. In spring-summer plumage (April to July), this form differs from *S. c. curruca* in the shorter bill, wing formula ($6 > 2 > 7$ vs. $P2 = P6$, rarely $6 > 2 > 7$ or $5 > 2 > 6$), ash-grey, less brownish crown and nape, and lighter and grey rest of upper parts. It is close to eastern specimens of the nominotypical subspecies [Sushkin designated them as var. *affinis* (now *S. c. blythi*)], having the same wing formula. As compared with *S. c. halimodendri*, the southern *S. c. minula* (= *minuscula*) has a shorter bill and more rounded wing (often $P2 = P7$ or even $7 > 2 > 8$), with lighter crown and rufous back; *S. c. margelanica* has a longer wing and sharper differences in coloration of "cap" and back.

Upper parts of the single bird in juvenile plumage are yellower than those of adults. They are also lighter and less brown as compared to those of *S. c. curruca* and *S. c. var. affinis* (= *S. c. blythi*) in juvenile plumage and greyer and darker, especially on crown, than those of *S. c. minula* (= *minuscula*), without the well expressed in *S. c. minula* yellow tint in lower part of crown and on nape.

Noting the reality and constancy of mentioned traits, Sushkin has stressed the intermediate position of *S. c. halimodendri* between *S. c. var. affinis* (= *S. c. blythi*) and *S. c. minula* (= *minuscula*).

In addition to the morphological characters mentioned, *S. c. halimodendri* differs in the breeding area and habitat. Birds are found in NE Aral Sea area, in thorny bushes, *Halimodendron biebersteinii* Zertova (= *argenteum* Bieb., 1808, non L., 1774) and *Elaeagnus songarica* (Bernh. ex Schlecht.) Schlecht. (= *hortensis* Bernh. ex Schlecht.) growing on moist sandy soils on lower Irghiz and lower Turgai Rivers, including hilly sands Tusum. In Sushkin's opinion, the Mugodzhary and the area of N Kazakhstan pine forests are inhabited by northern forms [*S. c. curruca* and *S. c. var. affinis* (= *S. c. blythi*)]. There have been no data on the southern boundaries of distribution of *S. c. halimodendri*. The find of a bird with characters of *S. c. halimodendri* and *S. c. minula* by N.M. Przewalski in the Urungu River valley in April allowed Sushkin (1908: 691-692) to suggest a vast distribution of *S. c. halimodendri* in the east.

Later, Snigirewski (1929) confirmed this suggestion. According to him, *S. c. halimodendri* nests from the NE shore of the Caspian Sea to foothills of W Altai, Zaisan Depression and Tarbagatay Mts., in the south up to the lower Amudar'ya, central part of the Kyzylkum Desert and Tashkent. Migrant birds were collected in the S Altai, Semirechye, Fergana, the Pamirs, Amudar'ya, E Transcaspian area and E Iran, and, in autumn, also in Dzhungaria and Kashgaria east to Hotan; wintering in India.

The Kazakhstan subspecies was accepted by most taxonomists, but its scope was sometimes understood differently. Volchanetski (1954) included in *S. c. halimodendri* also more southern populations described as separate subspecies *S. c. jaxartica* Snigirewski, 1929 and *S. c. snigirewskii* Stachanov, 1929, but this opinion has not received any support.

Five of the six syntypes of *S. c. halimodendri* are kept in ZISP. They were collected by P.P. Sushkin in spring and summer 1898 in the area of the Turgai depression (N Kazakhstan).

One of the males (Sushkin, 1908: 691, locality no. 1), collected on 27.IV[9.V].1898 in sands Sarykopa, on the lower Irghiz River, S of the town Irghiz, is absent. According to the archives of the Ornithology Department, it has not been received by ZISP. All syntypes have an original label by P. Sushkin and a label "Zool. Inst. AN SSSR" (in Cyrillic characters; later on, cited as ZISP label); four specimens have also a third standard printed label "Coll. P. Suschkin" with characteristic rounded left margin and text written by Sushkin in German. The latter label is lacking only in one specimen (no. 3), which has been given by Sushkin to M.A. Menzbier and has been received by ZISP with his collection.

On the face of the original label, sex, date (Old Style) and locality are given, but not the collector's name (i.e. Sushkin). Inscriptions on the back of the label are made later, as evidenced by different, darker colour of Indian ink; they include: number of the specimen in the sample of the species collected in this trip, length (mm) of wing (U) and that of bill (Culm) measured to skull, and wing formula showing the position of the 2P tip relative to other P (for example, 6.2.7.). The same data are given on labels of Sushkin's collection, but here dates of collecting are in the New Style, all four specimens are identified as "*Sylvia curruca halimodendri* Sushkin", and the word "typus" is written by Sushkin on the label of one of the males. This record, together with individual differences between syntypes, which include individuals of different age collected at different dates, permits to designate the mentioned specimen as lectotype.

Lectotype (designated here). "♂, [1s], Sarykopa, [N Kazakhstan, sands on lower Irghiz River, 48°22'N, 61°38'E, 28.IV[10.V].1898. U = 63, Culm = 12.2; 6.2.7, no. 2", P. Sushkin (ZISP, 12098). Wing 62.6, tail 55.6, tarsus 19.7, bill from feathers 8.3, bill from nares 6.8, width of bill 2.7, depth of bill 2.9. Wing formula 6>2>7; tip of P2 situated nearer to tip of P6; outer vane on the top of P6 with shallow notch. Coloration of R6 typical of yearling bird: whitish (not pure white) field occupies somewhat more than one-third of inner vane, narrowing along shaft to feather base; only remnants of a small whitish spot present on the worn tip of R5.

Paralectotypes. (1) "♂, [1s], sands at mouth of Irghiz River, 28.V[9.VI].1898. U = 63; Culm = 12.5, 6 = 2.7, no. 3", P. Sushkin, from collection of M. Menzbier (ZISP, 100729). Wing 62.7, tail 55.8, tarsus 19.7, bill from feathers 8.6, bill from nares 6.7, width of bill 2.7, depth of bill 2.8. (2) "♂, [1s?], sands

Tusum [about 100 km E of town Irghiz, 20.VI[2.VII].1898. U=64, Culm = 12, 6.2.7, no. 4", P. Sushkin (ZISP, 120099). Wing 64.4, tail 54.4, tarsus 19.7, bill from feathers 8.7, bill from nares 6.8, width of bill 2.7, depth of bill 2.9. (3) "♂, [1s], sands Tusum, 20.VI[2.VII].1898. U = 64, Culm = 12, 6.2.7, no. 5", P. Sushkin (ZISP, 120100). Wing 63.8, tail 57.9, tarsus 19.1, bill from feathers 8.6, bill from nares 6.4, width of bill 2.7, depth of bill 2.8. (4) "? sex, [juv.], sands Tusum, 20.VI[2.VII].1898. U = 62, Culm = 11.5, 6.2.7, no. 6", P. Sushkin (ZISP, 120101/466-960). Wing 62, 4, tail 56.6, tarsus 19.6, bill from feathers 6.7, bill from nares 5.4, width of bill 2.4 (growth of bill not completed).

Discussion. The coloration of A13, PC and R5-6 and the shape of tips of PC and rectrices show that the lectotype and 3 paralectotypes are yearlings in first summer plumage. Plumage of two males collected on 2.VII is very much worn, especially the central pair of rectrices in 120099.

As Sushkin has noted, P2 in male 100729 is equal in length to P6, and in the rest of paralectotypes, including juv., P2 is somewhat shorter, but its tip is situated nearer to tip of P6 than to tip of P7, as in the lectotype. The traces of the notch on the top of the outer vane in P6 are visible in juv. and male 100729; in the remaining two males (in worn plumage), this character is not expressed.

It should be stressed that Sushkin's note concerning the intermediate position of *S. c. halimodendri* between mesophilous northern *S. c. curruca* and *S. c. blythi* and southern desert forms close to *S. c. minula* is true mainly as regarding the dimensions of birds. In the plumage coloration, *S. c. halimodendri* inhabiting semideserts of N Kazakhstan is closer to southern forms. In all plumages, its upper parts are noticeably lighter and have distinct yellowish tint, especially on mantle and outer vanes of remiges and their great coverts. In summer plumage, *S. c. halimodendri* may be also easily distinguished from northern forms due to the purer grey (less brown) colour of "cap" much more sharply contrasting with the greyish brown mantle, as in southern forms. The white pattern on R5 and especially on R6 is also more developed. The differences from *S. c. telengitica* are presented below.

***Sylvia curruca telengitica* Sushkin, 1925 – Telengitian Lesser Whitethroat**

The subspecies is named after Telengites, an ethnic group of Altaians inhabiting the valley of the Katun River and its tributaries.

The brief description by Sushkin includes the following data. "Above pale, greyish, with well developed bluish-grey on the pileum and pure grey little upper wing coverts, tail-coverts and rectrices. Dimensions large, bill a trifle shorter than in *curruca* but longer than in *halimodendri*, not thin; wing ♂ 63.5-69, ♀ 65-66, culmen 12-13.5; wing formula mostly 6>2>7. 18 specimens. SE Altai and NW Mongolia. Types: ♂ ad., ♂ j., 15.VIII. 1912, Chuya steppe; coll. Sushkin".

Of the mentioned series, 16 specimens are kept in the collection of ZISP. The data on two birds not received by ZISP are given under "Material" in the monograph on Altai birds (Sushkin, 1938: 182): numbers 6bis (♂, 12.VI.1914, Elangash River, Chuya steppe, SE Altai) and 10bis (♂, 3.VII.1914, lower Böku-Morin River, Khara-Gobi, NW Mongolia). Each of syntypes has three labels, as described for *S. c. halimodendri*. On the back of the original label (with text written later in violet ink), the original identification *margelanica* is substituted by *telengitica* and the number of the specimen of this species collected in Altai is given (there is an abbreviation "Alt." before the number). In addition, the word "typus" is written by Sushkin on the same side of the label of ad and 1w males collected on 15.VIII.1912 in "Chuya steppe" and "cotypus" on labels of other two birds collected there in the same day. These inscriptions are repeated also on standard labels of Sushkin's collection. The presence of two specimens with author's designation "typus" and considerable differences in plumage condition between birds from the series of syntypes give grounds for designation of the lectotype.

Lectotype (designated here). "♂, [ad], vicinity of Kosh-Agach [Russia, SE Altai, Chuy-skaya steppe, 49°56'N, 88°42'E, 1700 m a. s. l.], 2[15].VIII.1912, Alt.[ai] no. 4, typus", P. Sushkin (ZISP, 120111/466-960). Wing 67.3, tail 60.5, tarsus 19.4, top of bill broken, width of bill 2.5, depth of bill 2.8. P2-4 still have not completed growth in the process of postbreeding moult and the real wing formula cannot be determined (P2); the outer vane on the top of P6 with shallow notch. Pure white colour on R6 is very well developed and occupies the whole outer vane and more than 3/4 of the inner vane; a large, wedge-shaped, white spot is present on the apical parts of R5; the white spot on the top of R4 is small; on the top of R3, there is only a narrow whitish edge stripe.

Paralectotypes labelled "typus" and "cotypus" by P. Sushkin (with brief notes on dimensions). (1) "♂, [1w], vicinity of Kosh-Agach,

2[15].VIII.1912, Alt. no. 3, typus", P. Sushkin (ZISP, 120110/466-960). Wing 65.4, tail 58.5, tarsus 20.4, bill from feathers 8.3, bill from nares 6.4, width of bill 2.5, depth of bill 2.8. (2) "sex ?, [1w], vicinity of Kosh-Agach, 2[15].VIII.1912, Alt. no. 2, Cotypus", P. Sushkin (ZISP, 120109/466-960). Wing 68.2, tail 64.1, tarsus 20.6, bill from feathers 8.3, bill from nares 6.7, width of bill 2.5, depth of bill 2.8. The considerable length of the wing shows that the specimen is apparently a male. (3) "♂[?], [1w], vicinity of Kosh-Agach, 2[15].VIII.1912, Alt. no. 1, Cotypus", P. Sushkin (ZISP, 120108/466-960). Wing (left one) 64.4, tail 60.7, tarsus 20.4, bill from feathers 7.6, bill from nares 6.1, width of bill 2.5, depth of bill 2.7. In the original label of this specimen, is written that it is a ♀, but the sex is changed to ♂ in the label of Sushkin's collection. The length of the right wing is 68.6, but its carpal joint is damaged; judging from the relatively small length of the not damaged left wing, the specimen may be a ♀.

Other paralectotypes (nos. 4-15), with data on their labels: [Russia, SE Altai, Chuyskaya steppe, 1700-1900 m a. s. l.], near Kosh-Agach, (4) ♂, [ad], Alt. no. 14 (205), (5) ♂, [1s], Alt. no. 15 (206), (6) ♀, [1s], Alt. no. 16 (207), 14[27].VI.1915, V. Pereverziev (ZISP, 120120, 120121, 120122/466-960); (7) lower Chagan-Burgazy River, ♂, [juv.], Alt. no. 13, 18[31].VII.1914, P. Sushkin (120119/466-960); Elangash River [between Kosh-Agach and Chagan-Uzun River], (8) ♂, [1s], Alt. no. 5, (9) ♂, [ad], Alt. no. 6, 30.V[12.VI.]. 1914, P. Sushkin (ZISP, 120112, 120113/466-960); [NW Mongolia, Khara-Gobi]: lower Böku-Morin River, (10) ♂, [ad], Alt. no. 7, (11) ♀, [ad], Alt. no. 8, 14[27].VI.1914, (12) ♂, [ad], Alt. no. 10, (13) ♂, [1s], Alt. no. 11, 20.VI[3.VII].1914, (14) ♂, [1s], Alt. no. 12, 21.VI[4.VII].1914, P. Sushkin (ZISP, 120114, 120115, 120116, 120117, 120118/466-960); (15) reeds near Achit Nuur Lake [western shore], juv., Alt. no. 9, 17[30].VI.1914, P. Sushkin (120628/466-960).

The lectotype and three paralectotypes collected in mid-August bear a very fresh winter plumage; most of topotypes (8 ♂ and 2 ♀) have a summer plumage, it being considerably worn in five birds collected in late June and early July. In one bird in juvenile plumage (120628), remiges and rectrices have not still completed growth (wing length 54.6 mm, tail length 38.7 mm), but tarsus has reached definite size (20.6 mm); the juvenile male (120119) is finishing the postjuvenile

moult: new feathers are present on nape, mantle and underside of the body.

S. c. telengitica is larger than other subspecies, except *S. c. margelanica* (= *S. c. chuancheica*): in males of the type series (n = 12), wing 67.8 ± 1.8 (65.4-70.8), tail 60.6 ± 1.7 (58.2-64.1), tarsus 20.4 ± 0.7 (14.4-21.3), bill from feathers (n = 11) 8.7 ± 0.3 (8.3-9.1), bill from nares (n = 11) 7.1 ± 0.4 (6.4-7.7), width of bill (n = 12) 2.5 ± 0.1 (2.4-2.7), depth of bill 2.9 ± 0.1 (2.7-3.1). In three females, wing 64.4, 64.7, 66.4; tail 56.7, 60.5, 60.7; tarsus 19.6, 20.1, 20.4; bill from feathers 7.6, 8.1, 8.2; bill from nares 6.1, 6.6, 6.9; width of bill 2.5, 2.6, 2.6; depth of bill 2.7, 2.7, 3.0.

In most specimens (n = 10), the wing formula is $6 > 2 > 7$; in half of birds, tip of R2 being situated nearer to the tip of P7; in juvenile male 120119, P2 = P7, but in three individuals collected on 26.VI.1915 near Kosh-Agach, P2 = P6. The outer vane of P6 with distinct notch on the top in 11 birds, without notch in 3 birds (120110, 120116, 120122); in one more bird, this vane is very much worn.

Discussion. *S. c. telengitica* is most close to *S. c. blythi* in the size and plumage coloration, but its upper parts are lighter. Combination of ash-grey cap, sharply contrasting with brown mantle not only in the summer plumage but usually also in the fresh winter plumage, brownish grey upper tail-coverts and greyish brown (not brown) central pair of rectrices (R1) distinguishes well this mountain subspecies from northern *S. c. curruca* and *S. c. blythi*. In addition, individuals with a notch on the outer vane of P6 predominate in *S. c. telengitica* and birds with the tip of P2 situated nearer to the tip of P7 than to P6 occur more frequently.

As compared with *S. c. halimodendri*, the Telengitian Whitethroat is larger (in wing, tail, and tarsus), but differences in the size of bill noted by Sushkin are not confirmed. In all plumages of *S. c. telengitica*, upper tail-coverts and R1 are greyer, not dark brown; in summer plumage, the mantle is somewhat darker, more greyish, without yellowish tint, which distinguishes individuals of *S. c. halimodendri* also in winter plumage.

From the rest of southern subspecies, *S. c. telengitica* differs in the darker upper side and also, except for *S. c. margelanica*, in larger size.

The validity of this morphologically rather well separated subspecies was never doubted.

***Sylvia curruca snigirewskii* Stachanow, 1929 – Turkmenian Lesser Whitethroat**

S. c. snigirewskii has been given as a new replacement name for *Sylvia curruca turkmenica* Snigirewskii, 1927, preoccupied by *Sylvia mystacea turkmenica* Zarudny & Bilkevich, 1918.

Snigirewskii (1927) has described this subspecies in detail from 15 specimens collected in the eastern part of the Karakum Desert and designated the holotype (p. 37).

Holotype. “♀ ad. 26.VIII.1925. near Repetek [Turkmenistan, Lebapskaya (= former Chardzhouskaya) Prov, 38°34'N, 63°13'E], no. 262 in my [S.I. Snigirewskii] Collection” (ZISP, 100849/248-926). In addition to these data, on the original label of the holotype, there is also an inscription “*Sylvia curruca turkmenica* Snig.” made by Snigirewskii in black Indian ink, the locality is given as “Repetek, Transcaspiya”, and the name of the collector is given (“Coll. S.I. Snigirewskii”). The original number of Snigirewskii’s collection is lacking, instead there is a locality number (“Loc. N 67”). Wing 62.7, tail 53.6, tarsus 20.4, bill from feathers 8.4, bill from nares 6.8, width of bill 2.6, depth of bill 3.0. Wing formula $7>2>8$, tip of P2 situated near tip of P7; the outer vane on the top of P6 with distinct notch. Pure white colour on R6 well developed and occupies nearly the whole outer vane and more than upper half of the inner vane; white spots are present on apical parts of R5 and R4.

Paratypes. According to the entry in the registration book of the Ornithology Department, only the holotype has been given by Snigirewskii to ZISP (on 17.V.1926). His other collections made in Karakum in summer and autumn 1925 were received by the Zoological Museum of the Moscow University (Rustamov, 1954). Among them, there are two other females of Lesser Whitethroat collected by Snigirewskii on 18 and 23 August 1925 near Repetek (collection numbers R-35728 and 35725). Sudilovskaya (1972) erroneously listed the second of these birds as a type, and Kalyakin (2001) repeated this mistake, having cited this specimen as the holotype. Both specimens in ZMMU collection are in fact paratypes. Of the 14 paratypes, six birds from Karakum were received by Snigirewskii on loan from the private collection of Marie W. Strom (Snigirewskii, 1927: 35).

In a later publication, Snigirewskii (1929: 260) noted that *S. c. turkmenica* is distributed in “Eastern part of Turkmenistan, to Merv oasis in the west”. However, he has not visited

this oasis (Snigirewskii, 1928) and could include this locality in the range of the subspecies only based on the following specimens of the ZISP collection examined by him in 1926: (1) “♀, [1s], 3./16.IV.1911, Transkaspien, Station Dort-Kuju [near Merv], H. Loudon, no. 12015” (ZISP, 100847/559-911). Wing 62.6, tail 56.3, tarsus 19.5, bill from feathers 7.8, bill from nares 6.9, width of bill 2.6, depth of bill 2.7. Wing formula $6>2>7$; tip of P2 situated nearer to the tip of P7; outer vane on the top of P6 with traces of notch only. (2) “♀, [1s], 5./18.IV.1911, Transkaspien, Station Dort-Kuju [near Merv], H. Loudon, no. 12079” (ZISP, 100848/559-911). Wing 60.2, tail 53.3, tarsus 19.6, bill from feathers 7.7, bill from nares 6.8, width of bill 2.6, depth of bill 2.7. Wing formula $7 = 2$; outer vane on the top of P6 with a shallow notch.

The inscription “close to *karakumensis* SIS” [SIS = S.I. Snigirewskii] made by pencil on the back of original labels is not sufficient to state that these two females belong to the type series. No other similar specimens which could be with confidence designated as paratypes of *S. c. snigirewskii* were found in the ZISP collection.

Discussion. Vaurie (1954, 1959) has cast doubt on the validity of this subspecies, Volchanetski (1954) put its name in the synonymy with *S. c. halimodendri*, and Portenko (1960) included the whole Turkmenia in the range of *S. c. jaxartica*; validity of *S. c. snigirewskii* was accepted only by few taxonomists (Korelov, 1972).

However, this form differs distinctly in its morphology and life history. Its plumage coloration is noticeably lighter than in the rest of more northern forms, as light as in *S. c. minula*, but the typical of *S. c. minula* ochre tint on the upper part of the body and flanks is almost absent, especially in the summer plumage. *S. c. snigirewskii* differs well from other subspecies of *S. curruca* in the purest light grey colour of mantle in all plumages. In addition, *S. c. snigirewskii* has relatively short and rounded wing, as in *S. c. minula*.

According to my observations, *S. c. snigirewskii* is a typical dweller of sandy deserts usually inhabiting stabilised dunes with *Haloxylon aphyllum*, *H. persicum* and other psammophilous trees and shrubs. It nests just in such habitats also in vicinity of Repetek (Sopyev, 1967; the author’s observations in 1958). The birds arrive to the Karakum already in between 10th and 12th March and begin to breed early: complete fresh clutches were

found in the first ten-day period of April (Rustamov, 1954; Sopyev, 1967). I have met fledglings and observed copulation of adults, which began the second nesting cycle, in *Haloxylon* desert woodlands near Dzhebel (39°34'N, 54°11'E) on 22.V.1979. These data, and also a find of a nest with four eggs in Chil'mamed-kum on 12.IV.1946 (Rustamov, 1954) evidence that *S. c. snigirewskii* inhabits sandy deserts all over the south of Turkmenistan, west up to the Caspian shore.

The mentioned differences in the morphology and life history of Turkmenian birds are important and indicate the distinctness of this form from *S. c. minula*, contrary to Wolters (1980), and especially from *S. c. jaxartica*, as opposed to Stepanyan (1978, 1990), Watson (1986), and Roselaar (1992). Recognition of the subspecies *S. c. snigirewskii* is well justified.

***Sylvia curruca jaxartica* Snigirewski, 1929** – Syrdarya Lesser Whitethroat

The subspecies is named after Jaxart, the ancient name of the Syrdarya River.

Snigirewski has briefly described this subspecies from 17 specimens of ZISP collection, mainly from the lower Syrdarya River valley [between Perovsk (= Kyzylorda) and Kazalinsk], and designated the holotype.

Holotype. “♂ ad. 24.VII.1858 [Old Style!], Syr-Darja, Coll. Ssewetzow [Severtsov], Originalnumber 10267 (sub nom. *minula*); befindlich im Zool. Mus. Acad. d. Wissensch. in Petersburg” (ZISP, 100798). The original Severtsov's label is lacking, but there are an old and a new label of ZISP collection. On the face of the first label, in addition to the above data, there is an inscription “*Sylvia minuscula*, Hume” and, on the back, the original number of Severtsov's collection “no. 872 c. Ss.” and inscription “*Sylvia curruca jaxartica* Snig. det. Ser. Snigirewski 1926” made by Snigirewski in black Indian ink; later, the word “Typus” is added there by a different hand. In the new label, the date of collecting of the bird is given in the New Style (5.VIII).

Thus, the original number (10267) given by Snigirewski is that of the old ZISP collection, rather than of Severtsov's collection. Judging from the plumage, the age of the bird has been determined inaccurately: it is not “ad male”, but a yearling in a very fresh winter plumage [1w]. Wing 67.3, tail 58.6, tarsus 19.6, bill from feathers 8.6, bill from nares 6.9, width of bill 2.5, depth of bill 3.0. Wing formula P2 =

P7; outer vane on the top of P6 with a distinct notch. The white area on R6 is well developed and occupies more than half of the inner vane; a small wedge-shaped whitish spot is present on apical parts of R5.

In addition to the holotype, I have found other 15 birds from the type series due to the inscription “*Sylvia curruca jaxartica* Snig. det. Ser. Snigirewski 1926” on the back of the original or old labels of the ZISP collection. Apparently, only 12 birds among them really belong to the population inhabiting the lower Syrdarya valley. The remaining three skins without question belong to migrating individuals of other subspecies (see below).

Paratypes belonging to *S. c. jaxartica*. Kazakhstan, Syrdar'ya River [between Kyzylorda and Kazalinsk], 1853, coll. E. Eversmann, (1) sex ?, [ad, late summer], (2) sex ?, [ad, late summer] (ZISP, 100808, 100809); coll. N.A. Severtsov, (3) ♂, [ad], 17[29].VII.1858, (4) ♂, [ad], 18[30].VII.1858 (ZISP, 100801, 100804), (5) ♂, [1s], 9[21].VI.1858 (ZISP, 100799), (6) ♀, [1w], 14[26].VII.1858 (ZISP, 100796), (7) ♂, [1w], 23.VII[4.VIII].1858 (ZISP, 100805), (8) ♂, [1w], 17[29].VIII.1858 (ZISP, 100803), (9) ♂, [juv.], 13[25].VI.1858 (ZISP, 100802), (10) ♂, [juv.], (11) ♂, [juv.], 16.VI.[28.VI.] 1858 (ZISP, 100797, 100800), (12) ♂, [juv./1w], 14[26].VII.1858 (ZISP, 100806).

Five paratypes (100801-100804, 100806) retain N.A. Severtsov's original label on old paper; in the rest of them, it is replaced by a standard old ZISP label with rounded left and right edges.

S. c. jaxartica is a comparatively large form: in males from the type series, wing ($n = 8$) 64.9 ± 1.7 (62.1-67.3), tail ($n = 11$) 58.4 ± 2.0 (54.4-61.3), tarsus ($n = 11$) 19.8 ± 0.5 (18.7-20.4), bill from feathers ($n = 10$) 8.1 ± 0.4 (7.6-8.8), bill from nares ($n = 10$) 6.8 ± 0.1 (6.6-6.9). Wing formula: $6 > 2 > 7$ ($n = 1$), P2 = P7 ($n = 4$), $7 > 2 > 8$ ($n = 2$) and P2 = P8 ($n = 1$); outer vane on the top of P6 with a distinct notch ($n = 8$).

Paratypes not belonging to *S. c. jaxartica*. One bird identified by Snigirewski as *S. c. jaxartica*, with label “Syrdarya River, ♀, [1w], 20.VIII. [1.IX.] 1858, N. A. Severtzov” (ZISP, 100708), belongs to passing *S. c. blythi*. This is evidenced by the typical coloration of upper parts: rufous brown nape of the same colour as mantle (the latter has markedly more intense coloration than in the other specimens of the type series) and upper tail coverts only slightly darker than mantle. In addition, P2 = P6 and the notch on the outer vane of P6 is absent. It

should be noted that the whole upper side and flanks of this bird have an intense rusty brown tint, which is unusual for the species (probably, it is an individual with aberrant, chromistic coloration).

Further two birds identified by Snigirewski as *S. c. jaxartica*, with labels "Kyzylkum Desert, Sarbai-bulysh [vicinity of Tamdybulak (= Tamdy), according to archive data on the Glazunov's route in 1892], 2 sex ?, [1s], 19.IV[1.V.].1892, D.K. Glazunov" (ZISP, 100752, 100753) belong to passing *S. c. minula*. This is evidenced by the very typical of this subspecies coloration of the upper side of body, first and foremost the sharp contrast between light bluish grey "cap" and yellowish light brown mantle, greyish brown upper tail coverts, and also small size of birds (wing 58.6 and 60.2). It is possible that the description of the plumage coloration in the original diagnosis was influenced by inclusion of these birds in the type series: "Die Färbung ist wie bei *S. c. minula*..." (Snigirewski, 1929: 259).

Discussion. The birds from the lower Syrdarya valley differ considerably from *S. c. minula* not only in the larger size, but in the plumage coloration as well. The type series includes: (1) four adult birds finishing postbreeding moult (7-9th stages), (2) four yearlings (including the holotype) in very fresh first winter plumage, (3) one male in rather worn first summer plumage, (4) three males in juvenile plumage, and (5) one male (no. 100806) in postjuvenile moult (more than half of small feathers are new).

The upper parts of yearlings in fresh winter plumage are the most rufous and have a distinct ochraceous tint. This tint is absent in juveniles and adult birds in fresh winter plumage; their upper parts are simply rufous brown, in adult birds also somewhat darker. The upper parts of the male in worn first summer plumage are light brownish grey, without yellow or ochraceous tint.

Thus, *S. c. jaxartica* differs from northern subspecies, including *S. c. halimodendri* and *S. c. telengitica*, in the lighter upper parts in all plumages and, as a rule, in the more rounded wings, and from southern *S. c. snigirewskii* and *S. c. minula*, in the larger size. Snigirewski (1929: 259) suggested that *S. c. jaxartica* must differ from *S. c. margelanica*, as well as from *S. c. minula* in the longer bill. The plausibility of these differences will be examined in more detail in the forthcoming revision of subspecies of *S. curruca*.

Nine birds collected by N. Severtsov in the second half of August near Nukus in the lower

Amudarya valley and mentioned by Snigirewski (1929: 257) as close to *S. c. halimodendri*, are actually close in the size to *S. c. jaxartica*. I could not find any differences in the plumage coloration of ♂, ad, 17.VIII. (ZISP, 100825), which is finishing postbreeding moult, from *S. c. jaxartica* in the same plumage. Other seven males and one female in fresh first winter plumage differ from four specimens of *S. c. jaxartica* in the same plumage only in the somewhat less ochraceous upper parts. Thus, the delta of the Amudarya River is probably inhabited by *S. c. jaxartica* or populations intermediate to *S. c. snigirewskii*. Additional data on the distribution of Lesser Whitethroat in the lower Amudarya valley are necessary to determine more precisely the boundary between these subspecies.

***Sylvia curruca chuancheica* Portenko, 1950 – Alashanian Lesser Whitethroat**

When describing this subspecies, Portenko (1955: 505) has examined 16 specimens collected by N.M. Przewalski, G.E. and M.E. Grum-Grzhimailo, and P.K. Kozlov in China (upper course of the Huang He (Yellow) River and the Alashan Mts.) and has designated the holotype and one paratype.

Holotype. "♂, [ad], [China], Upper Huang He, near locality Gomi, May 1880 (Old Style), N.M. Przewalski" (ZISP, 163765/425-974). On the back of the original label, there is an inscription made by Portenko in red ink: "*Sylvia curruca chuancheica* Portenko 1953. Typus!". Wing 68.1, tail 60.4, tarsus 20.6, bill from feathers 8.2, bill from nares 6.8, width of bill 2.6, depth of bill 3.0. Wing formula 6>2>7; tip of P2 situated nearer to the tip of P6; outer vane on the top of P6 with distinct notch. The white area on R6 is well developed and occupies more than half of inner vane; a large wedge-shaped whitish spot is present on apical parts of R5; only a whitish stripe is present on the tip of P4.

Paratype. "♀, [1s], Huang He, [locality Guy-Duy], 14.VII.1890, G. and M. Grum-Grzhimailo" (ZISP, 100629). The original label is lacking, on the back of the old ZISP label there is an inscription by Portenko in red ink: "*Sylvia curruca chuancheica* Portenko 1953. Paratypus!". Wing 65.4, tail 56.9, tarsus 19.6, bill from feathers 8.1, bill from nares 6.6, width of bill 2.5, depth of bill 2.9. Wing formula P6 = P2; outer vane on the top of P6 with traces of notch only. White area on R6 occupies not more than one-third of inner vane.

In addition, I have examined 12 topotypes: 7 ♂, 3 ♀ and 2 juv. Most of them were collected in April and May, only one ♂ and both juvenile birds, in July. These birds are the largest in *S. curruca*: in males (including the holotype, $n = 8$), wing 68.5 ± 1.6 (65.6-70.9), tail 60.4 ± 1.9 (58.5-63.6), tarsus 20.7 ± 0.4 (20.1-21.4), bill from nares 7.7 ± 0.3 (7.4-8.2), bill from nares 6.6 ± 0.3 (6.2-7.2), width of bill 2.5 ± 0.1 (2.3-2.6), depth of bill 2.9 ± 0.1 (2.7-3.0). Wing formula $6 > 2 > 7$ ($n = 6$) predominates; in five birds, tip of P2 being situated nearer to tip of P6; in one male, $P2 = P6$; in one more male $P2 = P7$; outer vane on the top of P6 with distinct notch in five males, with shallow notch in two males, without notch in one male. In four females (including paratype), wing 62.1, 65.4, 66.1, 55.5; tail 56.6, 56.9, 58.3, 59.1; tarsus 19.6, 20.2, 20.6, 20.7; bill from nares 6.3, 3.6, 6.9.

Three males collected in April and May in Eastern Tsaidam (= Quaidam) by P.K. Kozlov do not differ from the types of *S. c. chuancheica* in the plumage coloration and are only somewhat smaller in the average dimensions (wing 66.1, 66.2, 66.6; tail 57.4, 58.3, 59.2), but significantly larger than *S. c. minula*.

In the differential diagnosis (Portenko, 1955), *S. c. chuancheica* was distinguished from *S. c. minula* and *S. c. margelanica* Stolzmann, 1897.

Discussion. The described by Portenko (1955) differences in the plumage coloration and dimensions between *S. c. chuancheica* (birds from the south-eastern part of the species range) and *S. c. minula* look quite true and were well known long ago (see Snigirewski, 1929: 259-260). Really, birds identified as *S. c. chuancheica* are much larger and in spring and summer plumage have darker upper parts without typical of *S. c. minula* yellowish tint. The differences in size are especially noticeable with consideration for the sex of birds (see above). It is possible, that Western Tsaidam is inhabited by birds of intermediate phenotypes.

But it should be noted also that the average wing length in *S. c. chuancheica* is the same as in *S. c. margelanica* (Portenko, 1955: 505, tab. 11). Apparently, they do not differ also in the plumage coloration, since "brownish grey tint of back and shoulders" mentioned by Portenko for *S. c. chuancheica* as distinguishing it from *S. c. margelanica* is associated with seasonal variation of plumages, rather than with geographic variation. All birds of *S. c. chuancheica* examined by Portenko are in worn spring and summer feathers, while 14 of 15 birds assigned by him to *S. c. margelanica* (ZISP collection) are in fresh winter plumage.

It would be very important to know where is the nesting area of birds described from two migrating specimens as *Sylvia margelanica* Stolzmann, 1897 (2 ♂, Uzbekistan, Fergana, near Margelan, 3.X.1893 and 5.IV.1894, T. Barey). Unfortunately, the location of these syntypes remains unknown. They were kept in Branitski's Museum in Warszawa. Though Sushkin and Snigirewski have not examined the type specimens of *S. c. margelanica*, they considered this form to be widely distributed in North China. Snigirewski regarded it as nesting from Lobnor Lake (= Lop Nur) in the west to the Alashan Mountain Range and Ordos in the east, and from 43°N in the north to Tsaidam in the south. Sushkin included in its nesting area also the Kunlun Mountains west to the Pamirs. ♀ and ♂ collected by Przewalski in the Russkiy (= Kaxtax Shan) Mountain Range (ZISP, 100527, 100528) in May and a moulting ♂, ad collected by M.V. Pevtsov in the Khalastan River valley, upper Tiznap He in August 1889 (ZISP, 100531) evidence that nesting of this large form in northern foothills of Kunlun is possible. My examination of these specimens shows that they do not differ significantly from *S. c. chuancheica*.

In contrast to the opinion of Sushkin and Snigirewski, Portenko (1955) suggested that *S. c. margelanica* is nesting only in the Eastern (Chinese) Tien-Shan. This conclusion could be based on a single female collected by Przewalski in the Chaidu-Gol (= Kaidu He) valley in May (Old Style) 1877 (ZISP, 100858). The exact date of collecting of this bird is unknown, but the expedition diary indicates that the lower reaches of Chaidu-Gol were crossed in the very beginning of May (Old Style); for this reason, it could be a migrant individual. This female was always assigned to *S. c. margelanica*; it is most similar in the plumage coloration, size and wing formula ($P2 = P6$) to the types *S. c. chuancheica* in corresponding plumage.

All the remaining birds from the ZISP collection identified as *S. c. margelanica* (9 ♂ and 5 ♀) and examined by Portenko are autumn migrants: two of them were collected in September, one, on 1.XI, and the rest, in October; nine specimens were collected in Fergana. Large individuals prevail, but the plumage coloration varies, and three birds should be assigned, without question, to various other subspecies. Particular attention should be given to a ♂, [1w], China, northern foothills of Nanshan Mts., Sydun, Beishan, 21.IX. 1890, G. and M. Grum-Grzhimailo (ZISP, 100865). On the back

of the old ZISP label, there is an inscription "*margelanica* (SIS)" made by S.I. Snigirewski in pencil. Large dimensions of the bird (wing 68.4, tail 63.7), wing formula ($P2 = P6$) and upper parts much lighter than those in *S. c. blythi* indicate that it belongs to *S. c. chuancheica*. Portenko has seen this bird but did not mention it. It is possible that he also assigned it to *S. c. margelanica*, though this male was collected much farther to the east from the Eastern (Chinese) Tien-Shan, near the north-western boundaries of the range of *S. c. chuancheica* outlined by him.

The above data show that Vaurie (1959) was correct when he placed the name *chuancheica* Portenko, 1955 in synonymy with *margelanica* Stolzmann, 1897.

***Sylvia althaea monticola* Portenko, 1955 – Middle Asian Mountain Whitethroat**

This subspecies was described as *Sylvia curruca monticola* from 50 specimens collected in the Kopetdagh, Pamirs, Alai and Tien Shan Mts., all from the ZISP collection; the holotype and paratype were designated in the original description.

Holotype. "♂, [ad], [Tajikistan], Gissar Mts., locality Kvak, 30 km N of Stalinabad [= Dushanbe], 1900 m a. s. l., 11 June 1948, A.I. Ivanov" (ZISP, 4469/244-948). A.I. Ivanov wrote the species name "*Sylvia althaea*" in black Indian ink on the back of the original label; below, there is an inscription made by Portenko in red ink: "*Sylvia curruca monticola* Portenko, 1953. Typus!". Wing 68.2, tail 57.9, tarsus 20.8, bill from feathers 10.8, bill from nares 8.7, width of bill 2.9, depth of bill 3.2. Wing formula $6>2>7$; tip of P2 situated near tip of P6; outer vane on the top of P6 with notch. The pure white area on R6 is well developed and occupies more than one-third of the inner vane; a small whitish spot is present on apical parts of R5; a narrow whitish stripe is only present on tip of P4. The holotype is an adult male in worn summer plumage.

Paratype. "♀, juv. [1w], Tajikistan, left bank of Khingou River, downstream of Tavi'l-Dara (= Tabi-Dara) [= Tavi'l-dara, 38°44'N, 70°30'E], 14.VIII.1935, A.I. Ivanov" (ZISP, 100674/228-936). On the back of the original label, in addition to identification "*Sylvia althaea*" (in black Indian ink) by A.I. Ivanov, there is an inscription made by Portenko in red ink: "*Sylvia curruca monticola* Portenko, 1953. Paratypus!". Wing 69.4, tail 60.2, tarsus 20.6, culmen from feathers 9.6, culmen from nares 8.1, width of

bill 2.9, depth of bill 2.2. Wing formula $P2 = P7$; outer vane on the top of P6 with distinct notch. The whitish area on R6 occupies about half of inner vane; a whitish spot is present also on apical parts of R5; a very narrow whitish stripe only present on the edge of the inner vane of the upper third of P4. The paratype is a yearling bird in very fresh winter plumage soon after the postjuvenile moult.

Among other birds from which the subspecies was described, the following specimen should be noted: "♀, ad, Tajikistan, [Badakhshan], vicinity of Khorogh [= Khorugh], 30.VI.1936, A.I. Ivanov (ZISP, 100668/195-938)". On the back of the original label of this bird, Portenko added "*monticola* Port." in blue ink to the inscription "*Sylvia althaea*" by A.I. Ivanov in black Indian ink.

Discussion. The comparison of birds in summer plumage from the type series of *S. a. monticola* with four breeding specimens from North-Western India (3 ♂ ad from Kashmir and ♂ 1s from Baltistan) confirms the differences noted by Portenko: upper parts are much darker in Indian birds, dark brown, rather than brownish grey. The separation of the Indian Mountain Whitethroat, *S. althaea althaea* Hume, 1878 and Middle Asian Mountain Whitethroat, *S. a. monticola* Portenko, 1955 is quite justified. It should be only noted that Portenko (1955: 506) erroneously included Balochistan (instead of Baltistan), in addition to Kashmir, in the range of the nominotypical subspecies.

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