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Corrections and Additions to the work entitled "Geometrid Moths of the World", edited by M. J. Scoble (Lepidoptera) - V

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Abstract: Corrections and Additions to the work entitled "Geometrid Moths of the World", edited by M. J. Scoble (Lepidoptera) - V. *Centr. ent. Stud., Misc. Pap.* 136: 1-2.

This paper deals with the corrections of the work entitled "Geometrid Moths of the World". Totally 11 scientific errors have been corrected. *Phalaena amabilis* Cramer, 1777 is invalid, as it is junior primary homonym of *Phalaena amabilis* Drury, 1773 [Noctuidae] (syn.n.); therefore, *Opisthoxia amabilaria* Hübner, [1825] is proposed as valid (sp.rev.). *Polymixinia lidjangina* ssp. *muhabbet* Koçak is proposed as replacement name (nom.nov.).

Keywords: Taxonomy, nomenclature, geography, all states, *Lepidoptera*, *Geometridae*

In the year of 1999, a very important nomenclatural and taxonomical catalogue has been published by the Natural History Museum London: "Geometrid Moths of the World". Approximately 35000 species group names listed in this catalogue with their original references. We compared the taxonomical information given in this catalogue with the basic information of our Centre. As a result of this, numerous geographical, taxonomical and nomenclatural errors has been recorded. In the previous issues, the necessary corrections have been made partly.¹ In the present part of this survey, totally 11 serious errors have been corrected. As in the previous cases, they have been briefly explained in the following table and grouped as follows;

- A - nomenclatural case
- B - nomenclatural error, imperfectness or misspelling
- C - geographical error or imperfectness
- D - geographical error or imperfectness and misspelling
- E - taxonomical error
- F - taxonomical and geographical error
- G - Incorrect punctuation or typing

Each case has been indicated below, in the remarks column of the table.

No	Page	Incorrect	Correct	Remarks
1.	106	<i>Carige bicuspis</i> ...[Borneo]: Sumatra (west)	<i>Carige bicuspis</i> ...[Indonesia]: Sumatra (west)	C
2.	534	<i>clavaria saisanica</i> Prout, 1937...[Russia]: Saisan.	Prout, 1937...[Kazakhstan]: Saisan.	C
3.	545	<i>chaoticaria</i> Alpheraky, 1897...[Central Asia]: Nan-Chan Mts.	<i>chaoticaria</i> Alpheraky, 1897...[China]: Nan-Chan Mts.	C
4.	546	<i>dissozyma</i> Prout, 1938... Table Mount...	<i>dissozyma</i> Prout, 1938... [Iraq]: Table Mount...	C
5.	546	<i>luigi</i> Viidalepp...[in Russian]	"[in Russian]" repeated two times!	G
6.	546	<i>mesoleucata</i> ...Central Asia: Ili Territory	<i>mesoleucata</i> ...[Uighur Ili]: Ili Territory	C
7.	546	<i>narynensis</i> ...Fort Naryn, Semirietschensk, Almatinka...	<i>narynensis</i> ...[Kazakhstan]: Fort Naryn, Semirietschensk, Almatinka...	C

¹ vide Nr.71 (2001), Nr. 86 (2002), Nr.90 (2004), and Nr.97 (2006) of this serial.

8.	547	<i>usgentaria</i> ...[Uzbekistan]: Kvasnowodsk...	<i>usgentaria</i> ...[Turkmenistan]: Krasnowodsk...	C
	671	<i>Opisthoxia amabilis</i> (Cramer,1777)	<i>Phalaena amabilis</i> Cramer,1777 is invalid (syn.n.), as it is junior primary homonym of <i>Phalaena amabilis</i> Drury,1773 [Noctuidae]. The latter is valid name of an African species currently used in the genus <i>Crameria</i> Hübner,[1819]. We propose here <i>Opisthoxia amabilaria</i> as the valid name, which is originally an emendation of <i>amabilis</i> Cramer. The name of the related taxon must be read as " <i>Opisthoxia amabilaria</i> Hübner,[1825]" (sp.rev.)	A
9	771	<i>Polymixinia decoloraria</i> Leach,1897...	read <i>Polymixinia lidjangina</i> Wehrli,1943 as valid species; the name <i>Boarmia decoloraria</i> Leach,1897 invalid, as it is junior primary homonym of <i>Boarmia decoloraria</i> Alpheraky,1889; replacement name <i>Polymixinia lidjangina</i> ssp. <i>muhabbet</i> Koçak is proposed here as valid name for <i>decoloraria</i> Leach,1897 nec Alph.,1889 (nom.nov.)	A
10.	826	<i>ardinata</i> Staudinger,1900...[Central Asia]: 'Mesopotamia', Mardin.	read as <i>ardinata</i> Staudinger,1900...[Turkey]: 'Mesopotamia', Mardin.	C
11.	841	<i>arenosaria</i> Staudinger,1879... [Russia (South-west)]: Narün	<i>arenosaria</i> Staudinger,1879... [Kazachstan]: Narün	C

Preliminary Checklist of *Loxostege* Hbn., with some taxonomical and geographical notes (*Lepidoptera*, *Pyralidae*)

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Abstract: Preliminary checklist of *Loxostege* Hbn., with some taxonomical and geographical notes (*Lepidoptera*, *Pyralidae*). *Centr. ent. Stud., Misc. Pap.* 136: 2-8, 3Tab.

This paper deals with the 89 species of *Loxostege* Hbn. in the World. A checklist of the valid species and subspecies with current synonyms are listed. Range of all species are given in Codes. Provincial distributions of the *Loxostege* species in Turkey are given. Two new species, *Loxostege afghana* Koçak & Kemal (sp.n.), and *Loxostege halil* Kemal & Koçak (sp.n.) are described from Afghanistan, and Turkey respectively. Foodplants of 7 species are mentioned and discussed. As faunal elements, all *Loxostege* species in Holarctic, Afrotropical, Orientalic and Neotropical Regions are evaluated and discussed briefly.

Keywords: Taxonomy, nomenclature, geography, *Loxostege*, *Lepidoptera*, *Pyralidae*

The valid name for the genus group taxon, *Loxostege* was established by Hübner, in [1825]. Its type-species is *Pyralis aeruginalis* Hübner,1796, by designated subsequently by Hampson (1918, *Ann. Mag. nat. Hist.*(9) 2: 189). This genus is currently placed in the subfamily *Pyraustinae* in the family *Pyralidae* (sensu Fletcher & Nye,1984; Shaffer, et al.,1996).²

Previously in *Loxostege* Hn. placed species living in Australia have been removed to the genus *Metallarcha* Meyrick,1884 by Shaffer et al. (1996). In the present list totally 89 species are listed with their current scientific synonyms, ranges (in codes) and, if they occur in Turkey, with provincial codes.³ Two new species, *Loxostege afghana* Koçak & Kemal (sp.n.), and *Loxostege halil* Kemal & Koçak (sp.n.) are described from Afghanistan, and Turkey respectively. Early stages and larval foodplants of the *Loxostege* species are very

² In last decades some authors classified the *Pyralidae* and divided into two families *Pyralidae* and *Crambidae*. According to this taxonomical approach, Subfamily *Pyraustinae*, including *Loxostege* Hbn., is placed in the family: *Crambidae* (e.g., Roesler,1978; Leraut,1997,etc.).

³ For the explanations of the Codes, download freely: <http://www.members.tripod.com/Cesa88/Code.pdf>

little known. Foodplants of 7 species are mentioned and discussed below. A remarkable pest species, mentioned here is *Loxostege sticticalis* (Linn.). As faunal elements, all *Loxostege* species in Holarctic, Afrotropical, Orientalic and Neotropical Regions are evaluated and discussed briefly.

***Loxostege* Hübner,[1825]**

Synonym(s): *Loxostege* Hübner,[1825]; *Leimonia* Hübner,[1825]; *Margaritia* Stephens,1827; *Boreophila* Guenée,1845; *Limonia* Agassiz,1847; *Cosmocreon* W.Warren,1892; *Maroa* Barnes & McDunnough,1914; *Polingia* Barnes & McDunnough,1914; *Parasitochroa* Hannemann,1964

1. ***Loxostege aemulalis* (Dognin,1905)** Synonym(s): *aemulalis* Dognin,1905 Range (in codes): BO Geographical Element: Neotropical
2. ***Loxostege aeruginalis* (Hübner,1796)** Synonym(s): *aeruginalis* Hübner,1796; *olivalis* Hübner,1796 Range (in codes): ES FR Si IT HU RO YU AL BG GR TR Province codes in Turkey: 05 16 Geographical Element: West Palaearctic (Holarctic). Foodplants of Larva: *Artemisia alba*, *A. campestris* (*Asteraceae*) (Parenti,2000).
3. ***Loxostege afghana* Koçak & Kemal (sp.n.)⁴** Synonym(s): *#robustalis* Amsel,1970; *afghana* Koçak & Kemal,2007 Range (in codes): AF Bark. Geographical Element: West Palaearctic (Holarctic).
4. ***Loxostege albiceralis* (Grote,1878)** Synonym(s): *albiceralis* Grote,1878 Range (in codes): US Col Geographical Element: Nearctic (Holarctic). Foodplants of Larva: *Hibiscus sabdariffa* (*Malvaceae*) (Robinson, et al.,2007).
5. ***Loxostege albifascialis* (Hampson,1896)** Synonym(s): *albifascialis* Hampson,1896 Range (in codes): YE Ad Geographical Element: Afrotropical.
6. ***Loxostege allectalis* (Grote,1877)** Synonym(s): *allectalis* Grote,1877; *perplexalis* Fernald,1885 Range (in codes): US Tx Geographical Element: Nearctic (Holarctic).
7. ***Loxostege anartalis* (Grote,1877)** Synonym(s): *anartalis* Grote,1877 Range (in codes): CA BCo Abt Qb US Cf Ut Geographical Element: Nearctic (Holarctic). **(a) *Loxostege anartalis albertalis* (Barnes & McDunnough,1918)** Synonym(s): *albertalis* Barnes & McDunnough,1918 Range (in codes): CA BCo Abt CA BCo Abt **(b) *Loxostege anartalis anartalis* (Grote,1877)** Synonym(s): *anartalis* Grote,1877 Range (in codes): US Cf **(c) *Loxostege anartalis lulualis* (Hulst,1886)** Synonym(s): *lulualis* Hulst,1886 Range (in codes): CA Qb **(d) *Loxostege anartalis rainierensis* Munroe,1976** Synonym(s): *rainierensis* Munroe,1976 Range (in codes): US **(e) *Loxostege anartalis saxicolalis* (Barnes & McDunnough,1918)** Synonym(s): *saxicolalis* Barnes & McDunnough,1918 Range (in codes): US Ut
8. ***Loxostege annaphialis* (Grote,1881)** Synonym(s): *annaphialis* Grote,1881 Range (in codes): US Cf Geographical Element: Nearctic (Holarctic).
9. ***Loxostege anpingialis* (Strand,1918)** Synonym(s): *anpingialis* Strand,1918 Range (in codes): TW Geographical Element: Orientalic.
10. ***Loxostege argyrostacha* (Hampson,1910)** Synonym(s): *argyrostacha* Hampson,1910 Range (in codes): ZW Geographical Element: Afrotropical.
11. ***Loxostege asopialis* (Snellen,1875)** Synonym(s): *asopialis* Snellen,1875 Range (in codes): BR TT Geographical Element: Neotropical.
12. ***Loxostege aurantiacalis* (W.Warren,1889)** Synonym(s): *aurantiacalis* W.Warren,1889 Range (in codes): BR Geographical Element: Neotropical.
13. ***Loxostege baccatalis* Hulst,1892** Synonym(s): *baccatalis* Hulst,1892 Range (in codes): US Geographical Element: Nearctic (Holarctic).
14. ***Loxostege badakshanalisis* (Amsel,1970)** Synonym(s): *badakshanalisis* Amsel,1970 Range (in codes): AF Bd Geographical Element: West Palaearctic (Holarctic)
15. ***Loxostege bashgulalis* Amsel,1970** Synonym(s): *bashgulalis* Amsel,1970 Range (in codes): AF Bsg Kab Gz Geographical Element: West Palaearctic (Holarctic)
16. ***Loxostege bilinea* (Bethune-Baker,1894)** Synonym(s): *bilinea* Bethune-Baker,1894 Range (in codes): EG Geographical Element: West Palaearctic (Holarctic)
17. ***Loxostege boursini* (Lucas,1937)** Synonym(s): *boursini* Lucas,1937 Range (in codes): DZ Geographical Element: West Palaearctic (Holarctic)
18. ***Loxostege brevivittalis* (Hampson,1896)** Synonym(s): *brevivittalis* Hampson,1896 Range (in codes): IN Meg Ass Geographical Element: Orientalic.

⁴ ***Loxostege afghana* Koçak & Kemal** (sp.n.) Wingspan (female): 29-35mm. Antenna pubescent, uppersite of the first segments hairy. Palpus labialis and P. maxillaris as in *E. cruentalis* Hb. Frons with a round remarkable project. Ocelli visible. Haustellum normally developed. Body robust in structure. Markings on the upperside of forewing obscure. Ground colour creamy, transversal lines obscure. Discal marking visible. Colouration of cilia uniform, as in forewing. Hingwing almost white, without marking. Female genitalia illustrated in 1970, Beitr. naturk. Forsch. SüdWdtl. 29: 57, fig.27. Holotype 1 ♀, Paratype 1 ♀ Afghanistan: Barak, 1600m 29.7.1957 (in LNK). The name of this nomenclaturally new species is dedicated to the Afghan People.

19. *Loxostege brunneitincta* Munroe,1976 Synonym(s): *brunneitincta* Munroe,1976 Range (in codes): US Cf Geographical Element: Nearctic (Holarctic)
20. *Loxostege callipeda* Meyrick,1936 Synonym(s): *callipeda* Meyrick,1936 Range (in codes): ZR Geographical Element: Afrotropical
21. *Loxostege caradjana* (Popescu-Gorj,1991) Synonym(s): *caradjana* Popescu-Gorj,1991 Range (in codes): CN Ti Btn Geographical Element: Orientalic
22. *Loxostege cereralis* (Zeller,1872) Synonym(s): *cereralis* Zeller,1872 Range (in codes): US Tx Geographical Element: Nearctic (Holarctic). Foodplants of Larva: *Apium graveolens* (*Apiaceae*), *Beta vulgaris* (*Chenopodiaceae*), *Medicago sativa* (*Fabaceae*) (Robinson, et al.,2007).
23. *Loxostege clarissalis* (Schaus,1920) Synonym(s): *clarissalis* Schaus,1920 Range (in codes): PE Geographical Element: Neotropical
24. *Loxostege clathralis* (Hübner,[1813]) Synonym(s): *clathralis* (Hübner,[1813]; *comptalis* Lederer,1855 nec Frr.,[1848]; *#nivalis* Caradja,1916 Range (in codes): RO HV RU UA Cc GG TR IR KG Uk Tk Dj Ii AF Shah Kot Pnj Kab Ui Au Province codes in Turkey: 05 06 38 42 58 76 Geographical Element: West Palaeartic (Holarctic)
- (a) *Loxostege clathralis aksualis* Caradja,1916 Synonym(s): *aksualis* Caradja,1916 Range (in codes): Ui Au
25. *Loxostege commixtalis* (Walker,1865) Synonym(s): *commixtalis* Walker,1865; *indotatellus* Walker,1866; *septentrionalis* Tengström,1869 Range (in codes): NO SE FI EE RU CA Geographical Element: West Palaeartic, Nearctic (Holarctic). Foodplants of Larva: *Aster novae-angliae* (*Asteraceae*), *Beta vulgaris* (*Chenopodiaceae*), *Medicago sativa* (*Fabaceae*) (Robinson, et al.,2007).
26. *Loxostege comptalis* (Freyer,[1848]) Synonym(s): *comptalis* Freyer,[1848] Range (in codes): ES Mu FR YU RU Geographical Element: West Palaeartic (Holarctic)
27. *Loxostege confusalis* (South,1901) Synonym(s): *confusalis* South,1901 Range (in codes): CN Geographical Element: Palaeartic (Holarctic)
28. *Loxostege crocalis* (Hampson,1891) Synonym(s): *crocalis* Hampson,1891 Range (in codes): IN NI LK Geographical Element: Orientalic
29. *Loxostege croesusalis* (Hampson,1913) Synonym(s): *croesusalis* Hampson,1913 Range: Africa. Geographical Element: Afrotropical
30. *Loxostege cupreicostalis* (Dyar,1913) Synonym(s): *cupreicostalis* Dyar,1913 Range (in codes): MX Geographical Element: Neotropical
31. *Loxostege damergouensis* Rothschild,1921 Synonym(s): *damergouensis* Rothschild,1921 Range (in codes): NG Geographical Element: Afrotropical
32. *Loxostege darwinialis* (Sauber,1904) Synonym(s): *darwinialis* Sauber,1904 Range (in codes): DE Geographical Element: West Palaeartic (Holarctic)
33. *Loxostege decaryalis* Marion & Viette,1956 Synonym(s): *decaryalis* Marion & Viette,1956 Range (in codes): MG Geographical Element: Afrotropical
34. *Loxostege deliblatica* Szent-Ivány & Uhrík-Meszáros,1942 Synonym(s): *sulphuralis* Hübner,[1813] nec Thunb.,1784; *deliblatica* Szent-Ivány & Uhrík-Meszáros,1942; *huebneri* Koçak,1980 Range (in codes): IT AT CZ HU RO YU BG GR RU IR Enz Geographical Element: West Palaeartic (Holarctic)
35. *Loxostege diaphana* (Caradja,1934) Synonym(s): *diaphana* Caradja,1934 Range (in codes): CN Geographical Element: Palaeartic (Holarctic)
36. *Loxostege dilutalis* (Herrich-Schäffer,1849) Synonym(s): *dilutalis* Herrich-Schäffer,1849 Range (in codes): RU UA Cm Geographical Element: West Palaeartic (Holarctic)
37. *Loxostege distictalis* (Hampson,1913) Synonym(s): *distictalis* Hampson,1913 Range: Africa. Geographical Element: Afrotropical
38. *Loxostege egregialis* Munroe,1976 Synonym(s): *egregialis* Munroe,1976 Range (in codes): US Arz Geographical Element: Nearctic (Holarctic)
39. *Loxostege elutalis* Zerny,1914 Synonym(s): *elutalis* Zerny,1914 Range (in codes): Ui Ln Geographical Element: Palaeartic (Holarctic)
40. *Loxostege emiralis* (Oberthür,1888) Synonym(s): *emiralis* Oberthür,1888 Range (in codes): DZ IQ Bsr IR Elb Kdj Ss Kz Sde Ssh Ke Ana AF Pag Geographical Element: West Palaeartic (Holarctic)
41. *Loxostege ephippialis* (Zetterstedt,[1839]) Synonym(s): *ephippialis* Zetterstedt,[1839]; *dubitaria* Zetterstedt,[1839]; *frigidalis* Guenée,1854; *scandinavialis* Guenée,1854 Range (in codes): NO Geographical Element: West Palaeartic (Holarctic)
42. *Loxostege euprepialis* (Hampson,1913) Synonym(s): *euprepialis* Hampson,1913 Range: Africa. Geographical Element: Afrotropical
43. *Loxostege evermanni* (Staudinger,1892) Synonym(s): *evermanni* Staudinger,1892; *bicoloralis* W. Warren,1892 Range (in codes): KG Lps Ssn KK Ax CN Ui Ku Geographical Element: Palaeartic (Holarctic)
44. *Loxostege farsalis* Amsel,1950 Synonym(s): *farsalis* Amsel,1950 Range (in codes): IR Fa Com Geographical Element: Iranian (West Palaeartic, Holarctic)
45. *Loxostege flavinigralis* (Hampson,1910) Synonym(s): *flavinigralis* Hampson,1910 Range (in codes): ZW Geographical Element: Afrotropical
46. *Loxostege flavivenalis* (Hampson,1913) Synonym(s): *flavivenalis* Hampson,1913; *osthelderi* Schawerda,1932. Range (in codes): TR IQ Bgd Province codes in Turkey: 46 63. Geographical Element: West Palaeartic (Holarctic)

47. ***Loxostege floridalis* Barnes & McDunnough,1913** Synonym(s): *floridalis* Barnes & McDunnough,1913 Range (in codes): US Fl Geographical Element: Nearctic (Holarctic) Foodplants of Larva: *Lycium carolinianum* (*Solanaceae*) (Robinson, et al.,2007).
48. ***Loxostege formosibia* Strand,1918** Synonym(s): *formosibia* Strand,1918 Range (in codes): TW Geographical Element: Orientalic
49. ***Loxostege foviferalis* (Hampson,1900)** Synonym(s): *foviferalis* Hampson,1900 Range (in codes): LB Bei IL Pa TR IQ Rwz Bgd Brs IR Ahz Bu Se PK Sd Krc Province codes in Turkey: 31. Geographical Element: West Palaearctic (Holarctic)
50. ***Loxostege frustalis* (Zeller,1852)** Synonym(s): *frustalis* Zeller,1852; *leucostictalis* Zeller,1852 Range (in codes): ZA KE Geographical Element: Afrotropical. Foodplants of Larva: *Pentzia* (*Asteraceae*); *Poaceae* (Robinson, et al.,2007).
51. ***Loxostege fuscivenalis* (Schaus,1920)** Synonym(s): *fuscivenalis* Schaus,1920 Range (in codes): PE Geographical Element: Neotropical
52. ***Loxostege galbula* (R.Felder & Rogenhofer,1875)** Synonym(s): *galbula* R.Felder & Rogenhofer,1875 Range (in codes): CO Geographical Element: Neotropical
53. ***Loxostege heliosalis* (Hampson,1912)** Synonym(s): *heliosalis* Hampson,1912 Range (in codes): AR Geographical Element: Neotropical
54. ***Loxostege illustralis* (Dognin,1905)** Synonym(s): *illustralis* Dognin,1905 Range (in codes): EC Geographical Element: Neotropical
55. ***Loxostege immerens* (Harvey,1875)** Synonym(s): *immerens* Harvey,1875; *triumphalis* Grote,1902 Range (in codes): US Cf Geographical Element: Nearctic (Holarctic)
56. ***Loxostege impeditalis* (Maassen,1890)** Synonym(s): *impeditalis* Maassen,1890 Range (in codes): EC Geographical Element: Neotropical
57. ***Loxostege indentalis* (Grote,1883)** Synonym(s): *indentalis* Grote,1883 Range (in codes): US Ws Geographical Element: Nearctic (Holarctic)
58. ***Loxostege kearfottalis* Walter,1928** Synonym(s): *kearfottalis* Walter,1928 Range (in codes): US Arz Geographical Element: Nearctic (Holarctic)
59. ***Loxostege lacunalis* (Zeller,1852)** Synonym(s): *lacunalis* Zeller,1852; *fulvalis* W.Warren,1892; *xanthalis* Fawcett,1916 Range (in codes): ZA Geographical Element: Afrotropical.
60. ***Loxostege malekalis* Amsel,1950** Synonym(s): *malekalis* Amsel,1950 Range (in codes): IR Geographical Element: Iranian (West Palaearctic, Holarctic)
61. ***Loxostege massalis* (Walker,1859)** Synonym(s): *massalis* Walker,1859; *fredi* Amsel,1961 Range (in codes): AU QAU TW PK Sd Krc AF Gbh Srb Pag IR Fa Shr Geographical Element: Holarctic, Orientalic, Australic.
62. ***Loxostege minimalis* Amsel,1956** Synonym(s): *minimalis* Amsel,1956 Range (in codes): VE Geographical Element: Neotropical
63. ***Loxostege mira* Amsel,1951** Synonym(s): *mira* Amsel,1951 Range (in codes): IR Ss Chh Put Ana Ke Geographical Element: Iranian (West Palaearctic, Holarctic)
64. ***Loxostege mucosalis* (Herrich-Schäffer,[1848])** Synonym(s): *mucosalis* Herrich-Schäffer,[1848] Range (in codes): YU BG TR CN Ui Ku Province codes in Turkey: 05 06 30 34 71 Geographical Element: West Palaearctic (Holarctic)
65. ***Loxostege oberthuralis* Fernald,1894** Synonym(s): *oberthuralis* Fernald,1894 Range (in codes): US Arz Geographical Element: Nearctic (Holarctic)
66. ***Loxostege oblinalis* (R.Felder & Rogenhofer,1875)** *oblinalis* R.Felder & Rogenhofer,1875 Range (in codes): ZA Geographical Element: Afrotropical
67. ***Loxostege offumalis* (Hulst,1886)** Synonym(s): *offumalis* Hulst,1886 Range (in codes): US Arz Geographical Element: Nearctic (Holarctic)
68. ***Loxostege peltalis* (Eversmann,1842)** Synonym(s): *peltalis* Eversmann,1842 Range (in codes): RU Geographical Element: West Palaearctic (Holarctic)
69. ***Loxostege perticalis* (R.Felder & Rogenhofer,1875)** Synonym(s): *perticalis* R.Felder & Rogenhofer,1875 Range (in codes): CO Geographical Element: Neotropical
70. ***Loxostege phaeoneuralis* (Hampson,1900)** Synonym(s): *phaeoneuralis* Hampson,1900 Range (in codes): TM Krm KG T-S Geographical Element: West Palaearctic (Holarctic)
71. ***Loxostege plumbatalis* (Zeller,1852)** Synonym(s): *plumbatalis* Zeller,1852; *ferriscriptalis* Walker,1865; *plumbofascialis* Lederer,1863 Range (in codes): ZA Geographical Element: Afrotropical
72. ***Loxostege quaestoralis* (Barnes & McDunnough,1914)** Synonym(s): *quaestoralis* Barnes & McDunnough,1914 Range (in codes): US Arz Geographical Element: Nearctic (Holarctic)
73. ***Loxostege rhabdalis* (Hampson,1900)** Synonym(s): *rhabdalis* Hampson,1900 Range (in codes): Ui Ku KG Tk Dj MN Geographical Element: Palaearctic (Holarctic)
74. ***Loxostege scalaris* (Christoph,1877)** Synonym(s): *scalaris* Christoph,1877 Range (in codes): IQ Kbl IR Elb TM AF Srb Hr Bsg Geographical Element: West Palaearctic (Holarctic)
75. ***Loxostege scutalis* (Hübner,[1813])** Synonym(s): *scutalis* Hübner,[1813] Range (in codes): PT ES FR Geographical Element: West Palaearctic (Holarctic)

76. ***Loxostege sticticalis* (Linnaeus,1761)** Synonym(s): *lupulina* Clerk,1759 nec Linn.,1758; *sticticalis* Linnaeus,1761; *miana* Müller,1764; *sylvata* Panzer,1804; *tetragonalis* Haworth,1811 Range (in codes): ES FR Co Sa Si IT MT GB BE NL LU DE CH AT PL CZ SK HU RO YU AL BG GR Cr TR GG TM Kp DK NO SE FI EE LV LT RU Sb KG Tk Dj Ii Ui Kml IR Kh Dam Elb AF Hr PK Bl Qu CA Province codes in Turkey: 05 10 16 17 34 39 42 46. Geographical Element: Palaearctic, Nearctic (Holarctic). Foodplants of Larva: *Spinacia*, *Salsola*, *Beta*, *Chenopodium album* (*Chenopodiaceae*), *Medicago sativa*, *Pisum sativum*, *Phaseolus vulgaris*, *Onobrychis viciifolia*, *Trifolium* (*Fabaceae*); *Brassica oleracea* (*Brassicaceae*), *Artemisia vulgaris*, *A.campestris*, *Helianthus annuus* (*Asteraceae*); *Allium cepa* (*Alliaceae*); *Cannabis sativa* (*Cannabaceae*); *Cucurbita* (*Cucurbitaceae*); *Cyperus* (*Cyperaceae*); *Daucus carota*, *Foeniculum vulgare* (*Apiaceae*); *Gossypium* (*Malvaceae*); *Linum usitatissimum* (*Linaceae*); *Lycopersicon*, *Nicotiana*, *Solanum tuberosum* (*Solanaceae*); *Malus pumila*, *Prunus*, *Rosa*, *Sorbus* (*Rosaceae*); *Ricinus* (*Euphorbiaceae*); *Salvia* (*Lamiaceae*); *Triticum*, *Zea mays* (*Poaceae*) (Parenti,2000; et seq.).
77. ***Loxostege straminealis* (Hampson,1900)** Synonym(s): *straminealis* Hampson,1900 Range (in codes): TR LB Bsa IR Fa Com Province codes in Turkey: 42 Geographical Element: West Palaearctic (Holarctic)
78. ***Loxostege subcuprea* (Dognin,1906)** Synonym(s): *subcuprea* Dognin,1906 Range (in codes): AR Geographical Element: Neotropical
79. ***Loxostege tesselalis* (Guenée,1854)** Synonym(s): *tesselalis* Guenée,1854 Range (in codes): ES Mu FR Co Geographical Element: West Palaearctic (Holarctic)
80. ***Loxostege turbidalis* (Treitschke,1829)** Synonym(s): *turbidalis* Treitschke,1829 Range (in codes): FR IT DE CH? AT PL CZ SK HU RO YU BG GR TR DK SE EE LV LT RU MD UA BY Province codes in Turkey: 16 Geographical Element: West Palaearctic (Holarctic)
81. ***Loxostege typhonalis* Barnes & McDunnough,1914** Synonym(s): *typhonalis* Barnes & McDunnough,1914 Range (in codes): US Arz Geographical Element: Nearctic (Holarctic)
82. ***Loxostege unicoloralis* (Barnes & McDunnough,1914)** Synonym(s): *unicoloralis* Barnes & McDunnough,1914 US Arz Geographical Element: Nearctic (Holarctic)
83. ***Loxostege venustalis* (Cramer,[1782])** Synonym(s): *venustalis* Cramer,[1782]; *divulsalis* Zeller,1852; *testula* Hübner,[1833]; *jucundalis* Walker,1865 Range (in codes): ZA Geographical Element: Afrotropical.
84. ***Loxostege virescalis* (Guenée,1854)** Synonym(s): *virescalis* Guenée,1854 Range (in codes): FR IT CH AT RO YU BG Geographical Element: West Palaearctic (Holarctic)
85. ***Loxostege wagneri* Zerny,1929** Synonym(s): *wagneri* Zerny,1929 Range (in codes): TR Province codes in Turkey: 06 42 Geographical Element: Anatolian (West Palaearctic, Holarctic)
86. ***Loxostege xuthusalis* (Hampson,1906)** Synonym(s): *xuthusalis* Hampson,1906 Range (in codes): CN Ti Geographical Element: Palaearctic (Holarctic)
87. ***Loxostege yuennanensis* (Caradja,1937)** Synonym(s): *yuennanensis* Caradja,1937 Range (in codes): CN Yu Geographical Element: Orientalic
88. ***Loxostege halil* Kemal & Koçak (sp.n.)⁵** Synonym(s): *halil* Kemal & Koçak,2007. Range (in codes): TR Province codes in Turkey: 65. Geographical Element: Anatolian (West Palaearctic, Holarctic)
89. ***Loxostege ziczac* (Sauber,1899)** Synonym(s): *ziczac* Sauber,1899 Range (in codes): Ui. Geographical Element: Palaearctic (Holarctic)

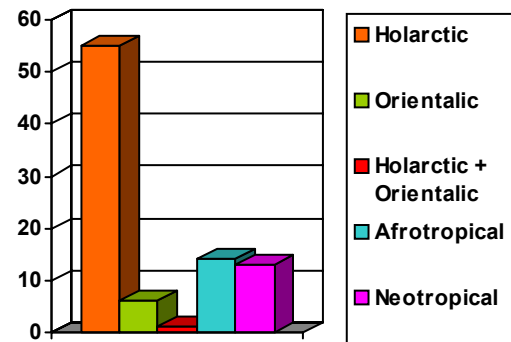
Discussion:

As result of this survey, it can be said that the genus *Loxostege* Hbn. is mainly Holarctic with 61.79% representation of the 55 species (Table & Graphic 1). On the other hand, rates of the species in Afrotropical and Neotropical cannot be overlooked, i.e., 15.73% and 14.60% respectively. In the Orientalic Region, this genus is represented by 6 species (6.74%). Only one species of the genus is distributed in the Regions of Holarctic, Orientalic, and Australic. Within the Holarctic, 37 Palaearctic *Loxostege* species are represented in 67.27%, while the rate of the 19 Nearctic species is 34.54%.

⁵ ***Loxostege halil* Kemal & Koçak (sp.n.)** - Brief description: Holotype ♂ Turkey: Van Prov., Çatak 1500m 5 11 2001 M.Kemal, A.Kocak & H.Özkol leg. Wingspan 30mm. Ground colouration creamy, markings on upperside brown. On forewing elongated discal marking and round spot in cell brown, well developed; basal line fine, irregular, pale brown; postdiscal line fine, undulated, pale brown, outer part creamy; ciliae brown. On hindwing ground colour brownish; post discal and submarginal creamy band well marked, undulated, the former bordered innerly by fine undulated brown line; ciliae brown. Antenna filiform, head small, abdomen slender, dark coloured on dorsal side with creamy posterior segmental borders. On underside wings no significant difference comparing with the upperside. Paratype 1♂ from the same place with holotype. Similar to holotype but smaller wingspan 25mm (all types in coll.Cesa). This new species is dedicated to Halil Özkol, our keen student on the Lepidopteroology, and collector of this species.

Table and Graphic 1 – Numerical evaluations of the elements of the genus *Loxostege* Hbn. in various geographical regions

Geographical Regions	Number element of and %	Geographical Subregions	Number of element and %
Holarctic	55 61.79%	Palearctic	37 – 67.27%
		Nearctic	19 – 34.54%
Afrotropical	14 15.73%		
Neotropical	13 14.60%		
Orientalic	6 6.74%		
Holarctic+Orientalic	1 1.12%		
Total	89 100%		



Eco-faunistically, this genus is represented by the species, inhabiting in mountain and plain steppes, semi-deserts of the Old and New World countries. Numbers of the *Loxostege* species found in some countries are given in Table 2. According to this, the U.S.A. and Iran are the two countries, where most *Loxostege* species occur, i.e., 19.1% and 12.35% respectively.

Table 2- Numerical evaluations of the *Loxostege* species found in some countries in Old and New World

country	species, %	country	species, %	country	species, %	country	species, %	country	species, %
Spain	5, 5.61%	Lebanon	2, 2.24%	Afghanistan	8, 8.98%	Russia	8, 8.98%	U.S.A	17, 19.1%
France	7, 7.86%	Turkey	9, 10.11%	Pakistan	3, 3.37%	Mexico	1, 1.12%	S. Africa	5, 5.61%
Algeria	2, 2.24%	Iran	11, 12.35%	Uighur Ili	7, 7.86%	Ecuador	2, 2.24%	India	2, 2.24%
Egypt	1, 1.12%	Iraq	4, 4.49%	Kazakhstan	5, 5.61%	Peru	2, 2.24%	Taiwan	3, 3.37%

Numbers of the *Loxostege* species found in some territories of the World are given in Table 3. According to this, North America and Middle East are the two territories, where most *Loxostege* species occur, i.e., 22.47% and 21.34% respectively.

Table 3- Numerical evaluations of the *Loxostege* species found in some territories in the World

Middle East (Turkey, Syria, Lebanon, Israel, Jordan, Iraq, Iran, Afghanistan); Central Asia (Turkmenistan, Kazakhstan, Kirgizistan, Uighur Ili); South Asia (Pakistan, India, Sri Lanka to Taiwan); Africa (all countries); North America (Mexico, U.S.A., Canada); South America (all countries in the Continent)

territory	species, %	territory	species, %
Middle East Countries	19 21.34%	Africa	10 11.23%
Central Asia	9 10.11%	North America	20 22.47%
South Asia	8 8.98%	South America	12 13.48%

In the present paper, two new *Loxostege* species are described: *Loxostege afghana* Koçak & Kemal from Afghanistan, and *Loxostege halil* Kemal & Koçak from Van, Çatak (Turkey).

Larval foodplants of only 7 species (7.86% of the total) are currently known in the literature. The preferred plant families as foodplants by the *Loxostege* species are as follows (in alphabetical order): *Alliaceae*, *Apiaceae*, *Asteraceae*, *Brassicaceae*, *Cannabaceae*, *Chenopodiaceae*, *Cucurbitaceae*, *Cyperaceae*, *Euphorbiaceae*, *Fabaceae*, *Lamiaceae*, *Linaceae*, *Malvaceae*, *Poaceae*, *Rosaceae*, and *Solanaceae*.

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