



NOTA / NOTE

Some new records of weevils (Coleoptera: Curculionidae) from Pakistan.

Zubair Ahmed ¹, Enzo Colonnelli ² & Massimo Meregalli ³

¹ Department of Zoology, Federal Urdu University of Arts, Science & Technology, Karachi (PAKISTAN).
e-mail: zbrahmed36@gmail.com

² Via delle Giunchiglie 56. I-00172 Rome (ITALY)

³ Department of Life Sciences and Systems Biology, University of Torino. Via Accademia Albertina 13. I-10123 Torino (ITALY)

Abstract: A collection of weevils was randomly carried out in various regions of Pakistan. Six of the species collected, belonging to three subfamilies of Curculionidae, result new for Pakistan: *Megamecus sciurus* (Olivier, 1807) (Entiminae); *Asproparthenis punctiventris* (Germar, 1824), *Menecleonus virgatus* (Schoenherr, 1832) and *Temnorhinus brevisrostris* (Gyllenhal, 1834) (Lixinae); and *Alcidodes karelinii* (Boheman, 1844) and *Hylobius angustus* Faust, 1891 (Molytinae).

Key words: Coleoptera, Curculionidae, weevils, new records, Pakistan.

Resumen: Algunas citas nuevas de curculiónidos (Coleoptera: Curculionidae) de Pakistán. Seis especies de curculiónidos pertenecientes a tres subfamilias de Curculionidae, procedentes de diferentes muestreos en diversas regiones llevados a cabo de forma aleatoria resultan ser nuevos para Pakistán: *Megamecus sciurus* (Olivier, 1807) (Entiminae); *Asproparthenis punctiventris* (Germar, 1824), *Menecleonus virgatus* (Schoenherr, 1832) y *Temnorhinus brevisrostris* (Gyllenhal, 1834) (Lixinae); y *Alcidodes karelinii* (Boheman, 1844) y *Hylobius angustus* Faust, 1891 (Molytinae).

Palabras clave: Coleoptera, Curculionidae, curculiónidos, nuevas citas, Pakistán.

Recibido: 11 de noviembre de 2014

Aceptado: 15 de noviembre de 2014

Publicado on-line: 2 de diciembre de 2014

Introduction

The superfamily Curculionoidea includes seven families with approximately 62,000 species described within 5,800 genera (Oberprieler et al. 2014). The classification of the superfamily is still debated, and also the composition of the subfamilies of Curculionidae is not uniformly considered. In particular, the Lixinae were usually regarded as a subfamily (Legalov et al. 2010; Meregalli & Fremuth 2013), but in Oberprieler et al. (2007) they were referred to the Molytinae. Lixinae were reinstated as a subfamily of Curculionidae in the last overview of the subfamily (Oberprieler 2014). The weevil fauna of Pakistan is inadequately known, with some papers by Aslam (1961a, 1961b, 1963, 1966, 1969) based on specimens conserved in the Natural History Museum, London. Chaudhry et al. (1966) collected many species of weevils from East and West Pakistan and gave information on species of economic interest. A contribution to the knowledge of the Molytinae and Lixinae of Indo-Pakistan was given by Aslam (1963), who proposed a key to the genera.

The present study deals with three species belonging to the subfamily Lixinae: *Asproparthenis punctiventris* (Germar, 1824), *Menecleonus virgatus* (Schoenherr, 1832) and *Temnorhinus brevisrostris*

(Gyllenhal, 1834); two species of Molytinae: *Alcidodes karelinii* (Boheman, 1844) and *Hylobius angustus* Faust, 1891; and one species of Entiminae: *Megamecus sciurus* (Olivier, 1807). A further species of Lixinae was recently reported as new for Pakistan (Ahmed et al. 2014). Two of the species here reported as new for Pakistan (*Hylobius angustus* and *Megamecus sciurus*) were actually cited in a checklist of weevils of Pakistan (Hashmi & Tashfeen 1992), but this checklist has a great number of mistakes in identification and nomenclature, with even the same species being listed more than once (e.g., *Ammocleonus aschabadensis* Faust, 1884 listed once with the correct name and once as a distinct species, *A. ashadensis* [sic], *M. sciurus* listed once as *Tanymecus sciurus* and once as *Esamus sciurus*, *Cleonis pigra* Scopoli, 1763 listed as *Cleonus (Tanymecus) piger*, thus mixing two subfamilies (Lixinae and Entiminae) between genus and subgenus, etc.), so that all data there reported are unreliable and need to be confirmed. Lyal & Curran (2000) investigated nomenclature and host plants of fifteen species of *Alcidodes* Marshall, 1939 from south-east Asia but they did not include *Alcidodes karelinii*. *Asproparthenis punctiventris* was actually listed from Pakistan in the *Catalogue of Palaearctic Coleoptera* (Meregalli & Fremuth, 2013), but the data were taken from personal information of the third author and not from published sources.

Material and methods

Specimens were collected by beating of bushes and hand picking. Specimens were identified by the second and third authors.

Results

Curculionidae: Entiminae: Tanymecini

Megamecus sciurus (Olivier, 1807)

Material examined: Pakistan, Province Khyber Pakhtoonkhwa, District Lower Dir, Tehsil Timergara, Village Thrail, 1♂, 20.VI.2011, leg. Atallah; Province Sind, District Tharparkar, Town Mithi, 2♂♂, 3♀♀, 17.VI.2012, leg. Ahmed Z.

Remarks: A species broadly distributed in India and West Bengal (Supare et al. 1990). It was observed to damage leaves of cotton and sugarcane (Nair 1986).

Curculionidae: Lixinae: Cleonini

Asproparthenis punctiventris (Germar, 1824)

Material examined: Pakistan, Province Balochistan, District Nushki, Village Zanginawar, 1♂, 16.VI.2012, leg. Shuja Jan.

Remarks: A pest of beet cultivation, broadly distributed in Europe, Asia and northern Africa (Meregalli & Fremuth, 2013).

Meneclonus virgatus (Schoenherr, 1832)

Material examined: Pakistan, Province Balochistan, District Nushki, Village Zanginawar, 1♀, 16.VI.2012, leg. Shuja Jan.

Remarks: A species distributed in Caucasus, central and western Asia (Meregalli & Fremuth, 2013), previously known as *M. anxius* (Gyllenhal, 1834). Possibly associated with Chenopodiaceae as other species of the genus (Ter-Minasyan 1988).

***Temnorhinus brevirostris* (Gyllenhal, 1834)**

Material examined: Pakistan, Province Balochistan, District Nushki, Village Zanginawar, 1♀, 16.VI.2012, leg. Shuja Jan; Province Sind, District Tharparkar, Town Mithi, 1♀, 22.VI.2012, leg. Ahmed Z.

Remarks: A species broadly distributed in northern Africa, including the Canary Islands, Arabian Peninsula, western and central Asia (Meregalli & Fremuth, 2013). Associated with Chenopodiaceae (Meregalli, personal observation in northern Africa).

Curculionidae: Molytinae: Hylobiini

***Hylobius angustus* Faust, 1891**

Material examined: Pakistan, Province Khyber Pakhtoonkhwa, District Lower Dir, Tehsil Timergara, Village Thrai, 1♂, 20.VI.2011, leg. Ataullah.

Remarks: A species described of northern India and also present in Nepal (Meregalli, unpublished data). Morphologically very similar to, and possibly a synonym of, *H. longulus* Faust 1882, widely distributed in central and south-eastern Siberia (Meregalli & Fremuth, 2013).

Curculionidae: Molytinae: Mecysolobini

***Alcidodes karelinii* (Boheman, 1844)**

Material examined: Pakistan, Province Khyber Pakhtoonkhwa, District Lower Dir, Tehsil Timergara, Village Thrai, 1♂, 20.VI.2011, leg. Ataullah.

Remarks: A species known from Caucasus, central Asia and India (Meregalli & Fremuth, 2013).

Acknowledgement

The authors thank the colleagues who helped in the collection in different localities of Pakistan.

References

- Ahmed, Z.; Meregalli, M. & Raza, H. 2014. A new record of the weevil *Pycnodactylopsis tomentosa* (Fåraeus, 1842) (Coleoptera: Curculionidae) from Sindh, Pakistan. *Pakistan Journal of Zoology*, **46**(3): 888.
- Aslam, N.A. 1961a. On Indo-Pakistan *Leptomias* Faust (Coleoptera: Curculionidae) and allied genera. *The Annals and Magazine of Natural History*, (13)**4**: 321-339.
- Aslam, N.A. 1961b. An assessment of some internal characters in the higher classification of the Curculionidae s.l. (Coleoptera). *Transactions of the Royal Entomological Society, London*, **113** (Pt. 14): 417-480.

- Aslam, N.A. 1963. On the genera of Indo-Pakistan Cleoninae and Hylobiinae (Coleoptera: Curculionidae). *Bulletin of the British Museum (Natural History). Entomology*, **13**(3): 47-66.
- Aslam, N.A. 1966. Revision of Tanymecine genera, *Achlaenomus* Waterhouse and *Hyperomias* Marshall and designation of type for *Strophosomoides* Aslam (Coleoptera, Curculionidae). *Annals and Magazine of Natural History*, (13)**9**: 405-416.
- Aslam, N.A. 1969. Revision of Indo-Pakistan *Parisomias* Faust (Coleoptera, Curculionidae) with some notes on *Leptomias* Faust. *Journal of natural History*, **3**: 543-560.
- Chaudhry, G.-U.; Chaudhry, M.I. & Khan, S.M. 1966. *Survey of insect fauna of forests of Pakistan*. Final Technical Report. Biological Sciences Research Division. Pakistan Forest Institute, Peshwar. 167 pp.
- Hashmi, A.A. & Tashfeen, A. 1992. Coleoptera of Pakistan. *Proceedings of Pakistan Congress of Zoology*, **12**: 133-170.
- Legalov, A.A.; Ghahari, H. & Arzanov, Yu. G. 2010. Annotated catalogue of Curculionid-beetles (Coleoptera: Anthribidae, Rhynchitidae, Attelabidae, Brentidae, Brachyceridae, Dryophthoridae and Curculionidae) of Iran. *Amurian Zoological Journal*, **2**(3): 191-244.
- Lyal, C.H.C & Curran, L.M. 2000. Seed-feeding beetles of the weevil tribe Mecysolobini (Insecta: Coleoptera: Curculionidae) developing in seeds of trees in the Dipterocarpaceae. *Journal of Natural History*, **34**: 1743-1847.
- Meregalli, M. & Fremuth, J. 2013. *Curculionidae: Lixinae: Cleonini*, pp. 437-456. In: Löbl, I. & Smetana, A. (eds.). *Catalogue of Palaearctic Coleoptera*. Vol. 8. Curculionoidea II. Brill, Leiden.
- Nair, M.R.G.K. 1986. *Insects and mites of crops in India*. ICAR, New Delhi. 375 pp.
- Oberprieler, R.G. 2014. *Curculionidae Latreille, 1802*, pp. 423-424. In: Kristensen, N.P.; Beutel, R.G. & Leschen, R.A.B. (eds.). *Handbook of Zoology. Arthropoda: Insecta. Volume 3. Coleoptera, Beetles. Morphology and Systematics*. De Gruyter, Berlin / Boston. 675 pp.
- Oberprieler, R.G.; Anderson, R.S. & Marvaldi, A.E. 2014. *Curculionoidea Latreille, 1802: Introduction, Phylogeny*, pp. 285-300. In: Kristensen, N.P.; Beutel, R.G. & Leschen, R.A.B. (eds.). *Handbook of Zoology. Arthropoda: Insecta. Volume 3. Coleoptera, Beetles. Morphology and Systematics*. De Gruyter, Berlin / Boston. 675 pp.
- Oberprieler, R.G.; Marvaldi, A.E. & Anderson, R.S. 2007. *Weevils, weevils, weevils everywhere*, pp. 491-520. In: Zhang, Z.-Q. & Shear, W.A. (eds.). *Linnaeus Tercentenary. Progress in Invertebrate Taxonomy. Zootaxa*, **1668**: 1-766.
- Supare, N.R.; Ghai, S. & Ramamurthy, V.V. 1990. A revision of *Tanymecus* from India and adjacent countries (Coleoptera: Curculionidae). *Oriental Insects*, **24**: 1-126.
- Ter-Minasyan, M.E. 1988. *Zhuki-dolgonosiki podsemejstva Cleoninae fauny SSSR. Kornevye dolgonosiki. [The weevils of the subfamily Cleoninae of the fauna of UdSSR. Roots weevils.] (Triba Cleonini)*. In: Skarlat, O.A. (Ed.). *Opredeliteli po faune SSSR (Izdavaemye Zoologicheskim Institutom Akademii Nauk SSSR)*, Volume 155, 1-235. Nauka, Leningrad.