

# ARTIGO / ARTÍCULO / ARTICLE

## On some *Leptomias* Faust, 1886 from Pakistan (Coleoptera: Curculionidae: Entiminae).

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**Abstract:** Some species of weevils belonging to genus *Leptomias* Faust, 1886 (Coleoptera: Curculionidae: Entiminae) are documented from Pakistan. Namely, two species, *Leptomias acuminatus* Aslam, 1961 and *L. longiscapus* Aslam, 1961 were studied and morphological characters and ecological descriptions are also provided. Moreover, *Leptomias acuminatus* is reported for Pakistan for the first time, from Kalam valley.

**Key words:** Coleoptera, Curculionidae, Entiminae, *Leptomias*, Pakistan, faunistics.

**Resumen:** Sobre algunos *Leptomias* Faust, 1886 de Pakistán (Coleoptera: Curculionidae: Entiminae). Se estudian algunas especies de gorgojos pertenecientes al género *Leptomias* Faust, 1886 (Coleoptera: Curculionidae: Entiminae) procedentes de Pakistán. A saber, se estudian dos especies, *Leptomias acuminatus* Aslam, 1961 y *L. longiscapus* Aslam, 1961, y también se aportan datos sobre sus características morfológicas y ecológicas. Además, *Leptomias acuminatus* se cita para Pakistán por primera vez del valle de Kalam.

**Palabras clave:** Coleoptera, Curculionidae, Entiminae, *Leptomias*, Pakistán, faunística.

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### Introduction

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Weevils (Coleoptera: Curculionidae) are the most diverse group of beetles, with 220,000 species likely to occur worldwide (Oberprieler et al., 2014). The broad nosed weevils of the subfamily Entiminae, with more than 12,000 known species, form the prevalent group of weevils and occur also worldwide (Nair, 1986). This subfamily includes many agriculturally important pests (Yunakov & Nadein, 2006). The genus *Leptomias*, initially described by Faust (1886) with *Pachynotus angustatus* L. Redtenbacher, 1844 as type species, is one of the significant genera in the tribe Tanymecini.

While studying the fauna of British India, Marshall (1916) stated that *Mylocherus undecimpustulatus* Faust, 1891 is one of the most severe pest species of weevils in India and Pakistan, where they ravage more than 20 crops. Although the delimitation of weevil families has now reached some measure of stability and support, seemingly undefeatable problems persist at subfamilial and tribal levels, where hundreds of taxonomic names stay in use, and up to now a modern knowledge about its taxonomic and ecological aspects is lacking.

However, more recently authors as Oberprieler et al. (2007), Legalov et al. (2010), Meregalli & Fremuth (2013) and Ahmed et al. (2014) stated that a more thorough and wide-ranging analysis is needed in order to stabilize the classification of this group. This paper is just a preliminary study on this subject which hopefully will provide a firm basis for future researchers.

## Material and methods

Specimens were collected from sugarcane, cotton, and various unidentified bushes, and by using an entomological net. Some of specimens were captured by hand picking. Samples were identified by means of the available literature and identification keys provided by Marshall (1916) and Aslam (1961). The material is deposited at the National College of Science (Sindh/Pakistan).

## Results

### Genus *Leptomias* Faust, 1886

*Leptomias* Faust, 1886: 132

*Heteromias* Faust, 1897: 344; Marshall, 1916: 172

*Parisomias* Faust, 1897: 342; Marshall, 1916: 172

*Cneorrhinus* L. Redtenbacher, 1844: 543 (non *Cneorrhinus* Schoenherr, 1823); Gunther & Zumpt, 1933

*Neoleptomias* Voss, 1961: 183

**Type species:** *Pachynotus angustatus* L. Redtenbacher, 1844

### *Leptomias acuminatus* Aslam, 1961

**Material examined:** 2♂♂, 4♀♀, 3.VI.2014 (Lakhwar & Panhwar leg.)

#### Diagnostic features:

Body ferruginous excluding head that is darker; dorsal and ventral sides covered with coppery scales; elytra with dark and white spots. Head punctate; frons with median groove thinner than rostrum and persistent behind the hind margin of eyes; head width a little more than twice the diameter of eyes, eyes convex, square dorsally. Rostrum longer than broad, subparallel, with median furrow narrowing towards base; short carina on each side diverging towards apex. Antennae with scape reaching middle of eye. Prothorax broader than long, slightly rounded, broader behind middle, apex somehow slighter than base and median ill-defined but present. Pronotum and sides rugosely and coarsely granulate, granules setose and squamose. Scutellum triangular. Elytra faintly pointed at base and humped, depressed between intervals three and four on each side before middle. Legs covered with coppery scales; foretibiae faintly curved at tip, denticulate and mucronate internally.

**Measurements:** ♂, Length: 9-10 mm; Width: 3-4 mm. ♀, Length: 11.5-12.5 mm; Width: 5-6 mm.

**Comments:** Aslam (1961) reported this species from the Tibet valley at an elevation of 9,000 ft. During the present survey it has been collected in the Kalam valleys at an elevation of 6,801 ft. This finding provides the first record of this species from Pakistan.

### *Leptomias longiscapus* Aslam, 1961

**Material examined:** 8♂♂, 3♀♀, 3.VI.2014 (Lakhwar & Panhwar leg.)

#### Diagnostic features:

Body coloration generally black, covered dorsally and ventrally with coppery scales; elytra with scattered dark spots. Head punctate; frons broader than rostrum and more than twice as broad as the convex eyes; rostral furrow slight and hardly surpassing hind margin of eyes. Rostrum as long as broad, pointed from base to the socket of insertion of antennae and then faintly widened but still slighter than the base; median furrow narrow and wide with a longitudinal impression on either side. Antennae with scape surpassing the hind fringe of eyes. Prothorax oblique, widest after middle, tip slighter than base, sides curvy; smooth in front but randomly and intensely punctate after head and lateral sides; base keeled but not clearly impressed. Scutellum small. Elytra tipped and bulging at base, shoulders curved a little after the base. Legs covered with scales; foretibiae denticulate and faintly curved.

**Measurements:** ♂, Length: 7.5-8.5 mm; Width: 2.5-3.5 mm. ♀, Length: 10-11.5 mm; Width: 4.7-6.5 mm.

**Comments:** Aslam (1961) captured this species at an elevation of 4,000 ft. in West Bhatket, Kumaon, India. During the present survey it has been collected in the fertile Jaglot valley at an elevation of 6,522 ft.

## Conclusions

Mahendiran & Ramamurthy (2013) stated that the subfamily Entiminae is distributed worldwide, mostly in tropical regions. *Leptomias* species were found severely feeding upon the fresh leaves of cotton plants and sugarcane. Gandhi & Pajni (1988) reported that the species belonging to genus *Leptomias* are pests of beans in Jammu and Kashmir (India).

From the present paper it is suggested that some more new species, subspecies and new records for the country would probably be added if more surveys are carried out in this region.

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## References

- Ahmed, Z.; Meregalli, M. & Raza, H. 2014. A new record of the weevil *Pychodactylopsis tomentosa* (Fåraeus, 1842) (Coleoptera: Curculionidae) from Sindh, Pakistan. *Pakistan Journal of Zoology*, **46**(3): 888.
- Aslam, N.A. 1961. On Indo-Pakistan *Leptomias* Faust (Coleoptera: Curculionidae) and allied genera. *The Annals and Magazine of Natural History*, (13)**4**: 321-339.
- Faust, J. 1886. Verzeichniss auf einer Reise nach Kashgar gesammelter Curculioniden. *Stettiner Entomologische Zeitung*, **47**(4-6): 129-157.
- Gandhi, S.S. & Pajni, H.R. 1988. On a new species of genus *Leptomias* Faust from Kashmir (Coleoptera: Curculionidae: Brachyderinae). *Research Bulletin (Science) of the Panjab University*, **39**(34): 151-153.
- 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.
- Mahendiran, G. & Ramamurthy, V.V. 2013. Checklist of the genus *Leptomias* Faust (Coleoptera: Curculionidae: Entiminae) of the world. *Munis Entomology & Zoology*, **8**(2): 604-612.
- Marshall, G.A.K. 1916. *Coleoptera, Rhynchophora, Curculionidae*. In: Shiply, A.E. (Ed.). *The Fauna of British India including Ceylon and Burma*. Taylor & Francis, London, xv + 367 pp.
- Meregalli, M. & Fremuth, J. 2013. *Curculionidae: Lixinae: Cleonini*, pp. 437-456. In: Löbl, I. & Smetana, A. (eds.). *Catalogue of Palearctic Coleoptera. Vol. 8. Curculionoidea II*. Brill, Leiden. 700 pp.
- Nair, M.R.G.K. 1986. *Insects and mites of crops in India*. ICAR, New Delhi. 375 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.

Yunakov, N.N. & Nadein, K.S. 2006. *New taxa of geophilic Entiminae (Coleoptera: Curculionidae) from the Balkan Peninsula, Caucasus and Central Asia. Entomologische Abhandlungen*, **63**(1-2): 77-98.