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LONGITARSUS MELANURUS (COLEOPTERA: CHRYSOMELIDAE) REPRODUCES ON ONOSMODIUM MOLLE (BORAGINACEAE)

Andrew H. Williams¹

Longitarsus melanurus (Melsheimer) was first associated with Onosmodium Michx. by Popenoe (1877) in Kansas where the sole species is O. molle Michx. (Great Plains Flora Assn. 1986). Recent field observations over several years showed that adults of L. melanurus feed on leaves of O. molle in Wisconsin, where these beetles were collected at 43 of the 59 sites where O. molle was found growing naturally (Williams 1996).

On several occasions, *L. melanurus* adults were found feeding on leaves of *Cynoglossum officinale* L. (Boraginaceae) at sites where *O. molle* also occurred (Williams 1996). These beetles were neither observed at these sites on foliage of several native borages: *Lithospermum incisum* Lehm. (31 sites), *L. canescens* (Michx.) Lehm. (30 sites), *L. carolinense* (Walter) MacMillan (1 site) and *Hackelia virginiana* (L.) I. M. Johnston (15 sites) nor were they seen on the exotics *Lappula squarrosa* (Retz.) Dumort (2 sites) and *Echium vulgare* L. (1 site) (Williams 1996). Furth (1994) reported *L. melanurus* using *E. vulgare* in Massachusetts and New York.

A simple experiment was done to test whether or not L. melanurus would reproduce on O. molle. Tiny, wild, bare rooted plants were potted and tightly caged. These were maintained free of other plants and without evidence of L. melanurus being present for more than a year. On 11 June 1996, 37 adults collected on O. molle in the wild that same day were introduced. Adults were removed between 27 and 29 June. The caged plants did not again harbor adults until 7 August. Between 7 August and 24 September 1996, 102 adults were removed from these plants. This shows that L. melanurus can reproduce on O. molle, the sole native species on which adults have been reported to feed (Popenoe 1877, Furth 1994, Williams 1996).

Specimens of *L. melanurus* were donated to the Insect Research Collection of the Entomology Department, University of Wisconsin - Madison. Plant nomenclature herein follows Gleason and Cronquist (1991).

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