

A SECOND SPECIES OF *MICROTHECKA* STÅL
(COLEOPTERA: CHRYSOMELIDAE)
FOUND IN NORTH AMERICA¹

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ABSTRACT

A new North American record of *Microtheca picea* (Guérin) is based upon two specimens collected in Alabama. This beetle's closest relative in North America, *M. ochroloma* Stål, is also a species introduced into Alabama and one of economic significance on cruciferous crops. Reference to their South American counterparts is made, a key to distinguish these two species is presented.

The genus *Microtheca* Stål (1860) contains 8 neotropical species and is placed in the tribe Entomoscelini of the subfamily Chrysomelinae (Chen 1934). Six species occur in Brazil and/or Argentina and/or Uruguay, 1 in Bolivia, and 1 in Colombia (Blackwelder 1946).

Inspectors of the Bureau of Entomology and Plant Quarantine detected the first specimen of *Microtheca* in North America in 1945. This was a single beetle found at the port of New Orleans on grapes from Argentina and identified by H. S. Barber as *M. ochroloma* Stål. In 1947, this species was discovered to be established in several localities in Mobile and Baldwin Counties, Alabama, damaging cruciferous plants (Chamberlin and Tippins 1948). Gentry (1954) reported *M. ochroloma* from Morengo Co., Alabama, on Irish potato. Seibels collected a large series of *M. ochroloma* on corn in Mobile Co., Alabama, in 1962; C. R. Patrick collected a single specimen in Baldwin Co., Alabama, in 1963; and F. E. Guyton observed this species in Lee Co., Alabama (Balsbaugh and Hays 1972). *M. ochroloma* also is established in Louisiana and Florida where it has been observed feeding on mustard greens and watercress, respectively (Woodruff 1974). On May 20, 1977, J. A. Strand collected 3 specimens of it on collard greens at Houston, Texas (E. G. Riley, personal communication). Chamberlin and Tippins (1948), citing unpublished records of H. L. Parker of the Bureau of Entomology and Plant Quarantine, indicated that *M. ochroloma* Stål is a serious pest of crucifers in Argentina and Uruguay. Specifically it has been collected in these countries on watercress, turnips, cabbage, radishes and roses (Bosq 1934; Hayward 1942; Ruffinelli and Carbonell 1944; Jolivet 1950).

While sorting through chrysomeline material of Auburn University, loaned by Dr. M. L. Williams, I recently discovered a second species of *Microtheca* new to North America. Strangely enough this specimen too was

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collected in Alabama—at Camden, April 19, 1957, by K. L. Hays. This beetle was sent to Dr. Richard E. White at the U. S. National Museum for specific determination, who in personal correspondence reported that "The beetle matches closely specimens in this collection determined by Monrós as *Microtheca picea* (Guérin). Our 5 specimens are from Argentina, but Blackwelder (1946) gives Uruguay." With additional searching, Dr. White came across a second specimen of *M. picea*, bearing the following data: Ballast dump, Mobile, Ala. 1.V.46. J. R. Ward (possibly, Wood), 46-6043. I also am indebted to Dr. White for loaning me 3 of the Monrós beetles for my study. I agree with his conclusion that the Camden specimen is conspecific with those determined by Monrós. This specimen also agrees with Guérin's (1844) original description of *M. picea*.

Only 3 genera of Chrysomelinae in North America have the procoxal cavities closed behind: *Timarcha* Latreille, *Entomoscelis* Chevrolat, and *Microtheca* Stål. The following key to genera is taken from Wilcox (1972) who illustrated this character, and provided habitus illustrations of both the larva and adult of *M. ochroloma*.

1. Prosternum, between coxae, longer than metasternum; British Columbia—California *Timarcha* Latreille
- 1'. Prosternum, between coxae, shorter than metasternum 2
- 2(1'). Elytral punctation confused; pronotum black with pale margins; elytra red with suture and a discal stripe black; 6.5-10 mm long; Minnesota—Washington—Alaska [*E. americana* Brown] *Entomoscelis* Chevrolat
- 2'. Elytral punctation in regular rows; pronotum entirely dark; elytra entirely dark, or predominantly dark but with borders and suture at base dull yellow; 4.1-6.0 mm long; Texas—Louisiana—Alabama—Florida *Microtheca* Stål

KEY TO SPECIES OF NORTH AMERICAN *MICROTHERCA* STÅL

1. Dorsum of uniform dark brown; each elytron with 7-9 striae of small punctures that are distinct to about basal 1/2, punctures evanescent caudad. 4.1-5.2 mm. (Fig. 1) *M. picea* (Guérin)
- 1'. Dorsum dark brown with elytra margined with dull yellow; each elytron with 4 striae of very large punctures that are distinct beyond the middle of elytron. 4.2-6.0 mm. (Fig. 2) *M. ochroloma* Stål

There is no doubt that the Alabama specimens of *M. picea* represent authentic records; whether or not *M. picea* is presently established in Alabama cannot now be determined. To establish this, collecting on corn and various cruciferous plants in the vicinity of Camden would be advised. Likewise, additional field surveys near the ballast dumps in the Mobile area might prove fruitful. Lindroth (1957), who collected at both European ballast quarries and American ballast dumps demonstrated that much of our introduced insect fauna arrived via ships' ballast. The single Alabama specimen of *M. picea* that was collected by Ward thus provides a good hint as to how this beetle might have gotten into Alabama.

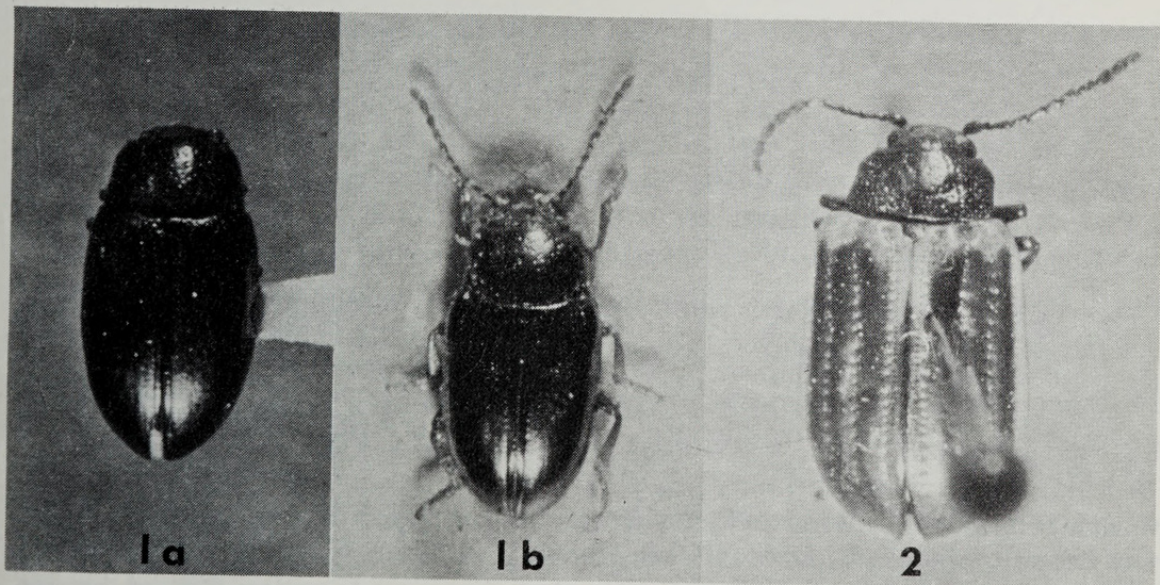
Other species of Chrysomelidae have disjunct distributions with populations in both South America and the southern United States. Balsbaugh (1969) found this type of distribution with the flea beetle, *Pseudolampis guttata* (LeConte), which is known from Alabama, Louisiana, and South Carolina, as well as from Uruguay and Mato Grosso, Brazil.

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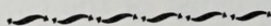
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Figs. 1a and 1b, *Microtheca picea* (Guérin): a) "Alabama. Camden. 19 Apr. 1957. K. L. Hays."; b) "R. A. Tucuman Oto. Trancas. Sn. Pedro de Colalao [Argentina]. 8.XI.1948. Col. F. Monros." "F. Monros Collection 1959."

Fig. 2, *Microtheca ochroloma* Stål, "Mobile Co., Ala. Semmes 14.V.1962. L. L. Walston & W. J. Seibels." "Feeding on corn."

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