(Mound and Walker, 1982: 305). McClintock and Knight (1968, Proc. Calif. Acad. Sci. (4) 32(20): 587–677, 14 figs., 5 pls.) present a flora of the San Bruno Mountains that include several introduced plants of the Australian Realm on which fungal hosts may be associated. These include Green Wattle, *Acacia decurrens* Willdenow and two other acacias—*A. melanoxylon* R. Brown and *A. retinodes* Schlechtendal. *Eucalyptus globulus* (Blue Gum) which is a native of Tasmania and Victoria, Australia, occurs in stands on various parts of the San Bruno Mountains, including the Guadalupe Parkway.

Based on the casual encounters of this thrips that I have made, I suspect that *Cartomothrips* sp. may develop sizeable populations.

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## NOTE

The Status of Aphelinus varipes (Foerster) and Aphelinus nigritus Howard (Hymenoptera: Aphelinidae)

The greenbug, *Schizaphis graminum* (Rondani) (Aphididae), was first recorded in the U.S. in 1882 (Webster and Phillips. 1912. U.S. Dep. Agric. Bur. Entomol. Bull. 110, 153 pp.). Its origin is unknown, but Webster and Phillips (1912) recorded it from Europe, Asia, and Africa by 1910. Howard (1908. Entomol. News 19: 365–367) described *Aphelinus nigritus* from six specimens (USNM type #12032) reared from the greenbug in South Carolina during the 1907 outbreak. *Aphelinus varipes* (Foerster) (1841. Beiträge zur Monographie der Pteromaliden Nees, 1. Heft. Aachen), was first introduced to California against *Aphis gossypii* Glover and later to Oklahoma against the greenbug (Jackson et al. 1970. J. Econ. Entomol. 63: 733–736). Specimens of *A. varipes* from Europe have also been sent to Missouri (R. Kirkland, personal communication) and Texas (F. Gilstrap, personal communication) for greenbug control.

Graham (1976. Syst. Entomol. 1: 123–146) studied the British *Aphelinus* and showed *A. varipes* to be a color-variable species. *Aphelinus nigritus*, however, has

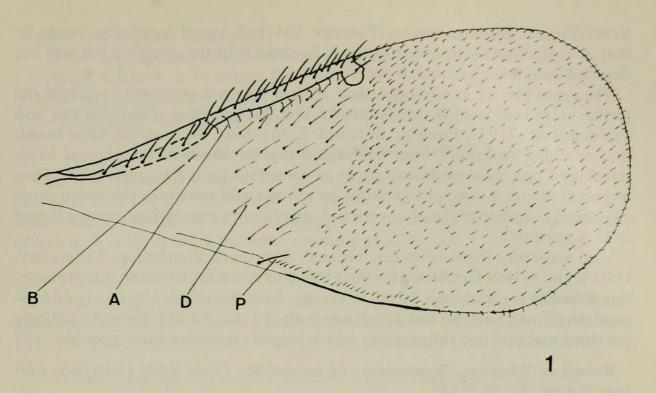


Fig. 1. Forewing of *Aphelinus varipes*. A = admarginal line setae; B = basal seta; D = delta setae; P = post-delta seta. Setae of costal cell not shown.

not been previously critically examined nor adequately compared to *A. varipes*. The present study is a result of difficulties encountered in distinguishing the two species following the release of *A. varipes* in areas where *A. nigritus* had previously been collected.

Eric Grissell kindly located four of the original specimens used by Howard (1908) in the description of *A. nigritus*. Two are point mounted. The other two are mounted on a single slide. From this syntype series, I now designate the lower of the two slide-mounted females (as indicated on a separate label) as **lectotype**.

Comparison of the lectotype of A. nigritus, the lectotype of A. varipes (Graham, 1976), specimens of A. varipes from Europe determined by Graham (USNM collection), specimens of A. varipes introduced to Texas from Europe, and specimens of A. nigritus from Texas, revealed little difference between the two species, and none that I consider significant. In material introduced to Texas from Europe, the scape, hindtibia, and first metasomal segment were generally more infuscate than in populations already occurring in Texas. There was some overlap in the color patterns, however. A careful comparison of the wing setation characteristics used by Hennessey (1981. Entomophaga 26: 363–364) also revealed no consistent differences. In both A. varipes and A. nigritus at least some of the admarginal line setae are on the membrane rather than on the marginal vein (Fig. 1). The number and position on and off the vein varied among specimens examined, but the presence of at least some of these setae on the membrane is an important feature (Hennessey, 1981). Other characters shared by A. varipes and A. nigritus include the presence of 13-30 delta setae, 1 (very rarely 2) post-delta setae, 3 rows of costal cell setae, and 0-2 basal setae.

Because of the failure to find any consistent differences between the two, Aphelinus nigritus Howard, 1908, is suppressed as a junior subjective synonym (New

Synonym) of *Aphelinus varipes* (Foerster, 1841). A logical conclusion would be that *A. varipes* was introduced to the U.S. along with the greenbug but was not detected until a large outbreak occurred.

The synonymy of A. nigritus with A. varipes does not necessarily preclude the further introduction of A. varipes to the U.S. for greenbug control. Frazer and van den Bosch (1973. Environ. Entomol. 2: 561–568), for example, have shown that an aphid parasitoid from one region may be much better adapted to an introduced pest than the same species of parasitoid from a second region. Thus importations of A. varipes to control greenbug could continue, but much more care should be given to the discovery and use of source populations better adapted to U.S. conditions.

I am especially thankful to Eric Grissell, Systematic Entomology Laboratory, USDA, and to Ron Hennessey for their thoughts and discussions on this problem. Ray Eikenbary, Oklahoma State University, Reed Kirkland, University of Missouri, and Frank Gilstrap and Tim Kring both of Texas A&M University willingly provided material and information which helped make this study possible.

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#### NOTE

Nomenclatural Notes on Apionidae (Coleoptera: Curculionoidea)

One of us (MAAZ) is assembling a world card catalogue of Apionidae, presently with some 2000 entries. Since most species of Apionidae at one time or another have been treated as *Apion*, and since no catalogue for the world has been recently published, it is not surprising to find uncorrected primary homonymies. Five such corrections are provided herein.

# Apion balfourbrownei Alonso Zarazaga, New Name

This is a replacement name for *Apion rubiginosum* Balfour-Browne, 1944 (Proc. R. Entomol. Soc. Lond. [B] 13: 18; South Africa), a primary homonym of *Apion rubiginosum* Grill, 1893 (Entomol. Tidskr. 14: 253). Grill proposed using the name *Apion rubiginosum* Dejean, 1821 (Catalogue de Coleoptères, p. 80) for the misidentification *Apion sanguineum* of Redtenbacher and other authors, not De Geer. Although Grill attributed the name to Dejean, *Apion rubiginosum* is properly attributed to Grill because the usage in the Dejean catalogue was a *nomen nudum*. Until recently (e.g., H. Silfverberg [ed.], 1979, Enumeratio Coleopterorum Fennoscandiae et Daniae, Helsinki, 79 pp.), the name *Apion rubiginosum* Grill was missed by cataloguers and therefore not in common use. In summary:

Apion sanguineum (De Geer, 1775). Curculio sanguineus De Geer, 1775. Apion miniatum Germar, 1833.



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