



## A synopsis of the orchid weevil genus *Orchidophilus* Buchanan (Curculionidae, Baridinae), with taxonomic rectifications and description of one new species

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### Abstract

Six species of the weevil genus *Orchidophilus* Buchanan are recognized: *O. epidendri* (Murray) **comb. n.** (= *Acythopeus genuinus* Pascoe **syn. n.**, = *Baris orchivora* Blackburn **syn. n.**, = *Apotomorhinus orchidearum* Kolbe **syn. n.**), *O. aterrimus* (Waterhouse), *O. eburifer* (Pascoe) **comb. n.** (= *Acythopeus gilvonotatus* Barber **syn. n.**), *O. peregrinator* Buchanan, *O. ran* Morimoto and *O. insidiosus* Prena **sp. n.** These species appear to be native to Indonesia, Malaysia, the Philippines and Singapore but are dispersed frequently with orchid cultivars by global trade. *Orchidophilus aterrimus* has been intercepted most frequently and now is established in several Indo-Pacific regions outside its native range. Nearly as common as, and occasionally confused with, the former is *O. epidendri*. *Orchidophilus ran* is of some significance in Japan and Korea, while *O. peregrinator*, *O. eburifer* and *O. insidiosus* were intercepted occasionally at scattered locations before 1970. An identification key for the six species is provided. Lectotypes are designated for *Baridius aterrimus* Waterhouse, *Acythopeus genuinus* Pascoe, *Baris orchivora* Blackburn and *Apotomorhinus orchidearum* Kolbe; a neotype is designated for *Centrinus epidendri* Murray.

**Key words:** weevils, orchids, adventive species, *Orchidophilus*, review, taxonomy, nomenclature, distribution

### Introduction

Buchanan (1935) described the genus *Orchidophilus* for dull blackish weevils that had been encountered in orchid cultures at various places in Europe, Asia, Australia, North America and Hawaii since the end of the 19<sup>th</sup> century. These beetles received considerable attention in the entomological and, more often, horticultural literature (Murray 1869, Waterhouse 1874, Blackburn 1900, Froggatt 1904, Meyer 1905, Kolbe 1906, Lea 1906, Quanjer 1906, Swezey 1912, 1934, Champion 1913, 1916, Reh 1913, Weiss 1917, Weigel & Sasser 1923, Blatchley 1925, Schlechter 1927). Their natural distribution remained imperfectly known, while they continued to appear sporadically in greenhouses and in plant quarantine (Fullaway 1938, Swezey 1945, Kalshoven 1951, Pritchard 1959, Voss 1961, Morimoto 1994, Chen & Zhang 2002). The number of interceptions decreased in the 1950s and 1960s with the use of DDT (Pritchard 1959) but then increased again, apparently coinciding with the abandonment of this insecticide. At least one species has recently invaded several Indo-Pacific islands (Anonymous 2001, Schmaedick 2002). It is now known that these weevils are native to Indonesia, Malaysia, the Philippines and Singapore, possibly also to Taiwan, Thailand and Australia, but still little attention has been paid to their constantly growing relevance in the global trade of orchids and the actual magnitude of the problem they present to the orchid industry. In this paper, I provide an overview of the species so far intercepted at United States ports-of-entry, their taxonomy, known plant associations and current distribution. My primary objective is to clarify the nomenclature of the known species and to encourage local researchers to continue their own investigations.