

**The Apionidae (Coleoptera) of the Canary Islands,  
with particular reference  
to the contribution of T. Vernon Wollaston**

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**Abstract.** The contribution of T. V. Wollaston to knowledge of the Canarian Apionidae is outlined in relation to subsequent work. An account is given of the material in his collections at The Natural History Museum, London (BMNH), and in the Hope Entomological Collections of the Oxford University Museum of Natural History (OUMNH). Keys to the genera and the 23 taxa (species and subspecies) currently known from the Canary Islands are provided. Notes on each taxon giving taxonomic, ecological, distributional and other information, together with new records, are included. *Lepidapion canariense* (Wagner, 1914), syn. nov., is here synonymised with *L. senex* (Wollaston, 1864) and a lectotype of the latter selected and labelled. The synonymy of *Catapion ceuthorhynchoides* (Wollaston, 1864) with *C. pubescens* (Kirby, 1811), originally proposed by DIECKMANN (1989), is confirmed. *Holotrichapion (Nesiapion) rotundipenne* (Wollaston, 1854), stat. restit., is removed from synonymy with *Hemitrichapion (Lotapion) wollastoni* (Chevrolat, 1852), and a lectotypes are designated for both species.

**Key words.** Apionidae, Wollaston, taxonomy, synonymy, lectotype, Canary Islands

## **Introduction**

Although T. Vernon Wollaston was not the first worker to investigate the coleopterous fauna of Macaronesia, his contributions (e.g. WOLLASTON 1854, 1864, 1865, 1867) are by far the most important of the nineteenth century. His collections were not maintained as a whole, but the major holdings are in the Natural History Museum, London (BMNH) and the Hope Entomological Collections, Oxford University Museum of Natural History (OUMNH).

There are also smaller collections in the Cambridge University Zoological Museum, Muséum National d'Histoire Naturelle, Paris, California Academy of Sciences, San Francisco (KAVANAUGH 1979, MACHADO 2006) and elsewhere. The BMNH collection (of Wollaston's Madeiran beetles) is 'generally considered to be the primary series and the Oxford series a second set' (SMITH & GRAHAM 1982), and the same appears to be true of his Canarian ones; in a letter from Wollaston to J. O. Westwood, quoted by these authors, it is stated that the Oxford collection 'was equally typical'. This collection contains generally less type material, particularly of unique specimens, than the BMNH one, but more individuals (though this is true of the Madeiran collection rather than of the Canarian one). Wollaston's first account of the Coleoptera fauna of the Canaries specifically refers to material in the British Museum (i.e. BMNH) (WOLLASTON 1864).

Other British workers, such as the Crotch brothers and J. E. Gray, were associated with Wollaston's studies, and it may be said that Canarian coleopterology was dominated in the penultimate decades of the nineteenth century by visitors from Britain. A recent publication has detailed many aspects of Wollaston's entomological and malacological work in Macaronesia and that of his colleagues (MACHADO 2006). A short biographical sketch, principally of Wollaston as a lepidopterist, is in SALMON (2000).

Throughout the late nineteenth and twentieth centuries the Canary Islands were a popular venue for investigation by many European coleopterists, the favourable climate (particularly in winter) and high degree of endemism of the fauna being especially valued. The comprehensive account of the Curculionoidea (excluding Scolytidae) published by LINDBERG & LINDBERG (1958) summarised what was known about the Canarian weevils up to 1954. In recent years resident Spanish workers have made major contributions, with many interesting species of beetle being discovered, particularly in the hypogean fauna (GARCIA et al. 2007, MACHADO 2008).

WOLLASTON (1864, 1865) gave accounts of fifteen Canarian Apionidae, then all regarded as species of the extensive genus *Apion* Herbst, 1797. No fewer than eleven of these were described as new by Wollaston himself and, although several of his names are currently in synonymy, his contribution to knowledge of the group was substantial. The type material of Wollaston's species is held mainly in British museums, predominantly in BMNH.

LINDBERG & LINDBERG (1958) gave accounts of 19 taxa, and provided distribution maps for ten of them. An illustrated work on the Canarian Apionidae (BRITO & OROMÍ 1986) considered the same 19 taxa, together with two species currently included in the family Nanophyidae (following ALONSO-ZARAZAGA & LYAL 1999). The detailed distributions of ten taxa considered to be endemic to the Canaries were given by GURREA & SANZ (2000). None of these authors was able to examine Wollaston's material in compiling their accounts.

Twenty-three taxa (species or 'subspecies') are considered in the current paper, with two relegated to synonymy. The paper's principal aims are to provide an up-to-date survey of the Canarian species, to relate subsequent contributions to Wollaston's pioneering work, and to give new records of most of the species, with a view to making knowledge of their distribution within the archipelago more comprehensive.

## Materials and methods

Wherever possible nomenclature follows ALONSO-ZARAZAGA (1990a), and is substantially the same as that in the important catalogue of Canarian Coleoptera of MACHADO & OROMÍ (2000). Fuerteventura and Lanzarote are particularly barren and have sparse faunas; they are collectively referred to here as the ‘Eastern Islands’, the others (El Hierro, La Palma, La Gomera, Tenerife, Gran Canaria) constituting the ‘Western Islands’. These designations do not accord with political division (in which Gran Canaria is included in the Eastern group), but have some significance zoogeographically. Names of plant hosts follow HANSEN & SUN-DING (1993).

## Wollaston’s collection

### BMNH Collection

Wollaston’s material consists of several parts. The most important section includes specimens which have been designated ‘Types’ by a later and unknown worker. It is assumed that this part of the collection was intended to be representative of all the species collected by Wollaston, and it can be thought of as the main Wollaston collection, particularly in view of the title of Wollaston’s account of the Canarian fauna (WOLLASTON 1864). However, there are also a ‘supplementary’ collection and a ‘residue’. The supplementary collection includes material evidently collected after the main collection had been formed and labelled. Some species discovered by other workers after Wollaston’s death are included. No Apionidae collected by Wollaston are included, but the type material of *Lepidapion spartocytisi* (Marshall, 1928) is in this supplementary collection.

The ‘residue’ consists of material formerly in the Exeter Museum, but which was given to BMNH in 1981. This residue includes substantial numbers of Apionidae, some specimens being in poor condition. Mostly common species are included and the material has much less importance than the main collection. Residue specimens are housed in a cabinet drawer and a storebox, and have not been formally accessioned or arranged; they are summarised in Table 1.

Table 1. Specimens of Apionidae in Wollaston’s ‘residue’ collection (ex Exeter Museum) in BMNH. No material from La Gomera, Lanzarote or Fuerteventura is included.

Species	El Hierro	La Palma	Tenerife	Gran Canaria
<i>Perapion fallax</i>				5 ♂♂ 1 ♀
<i>Aspidapion radiolus chalybeipenne</i>			2 ♂♂	
<i>Kalcapion semivittatum fortunatum</i>	2 ♀♀	2 ♂♂	3 ♀♀	2 ♂♂ 2 ♀♀
<i>Eutrichapion vorax</i>			9 ♂♂ 2 ♀♀	
<i>Taenapion delicatulum</i>			1 ♂	1 ♂
<i>Holotrichapion rotundipenne</i>			1 ♂	8 ♂♂ 6 ♀♀
<i>Holotrichapion umbrinum</i>				2 ♂♂ 1 ♀

Wollaston did not attach data labels to his specimens (in most cases), but distinguished individual islands of capture by means of colour-coding the bases of the cards on which his specimens were mounted; cards of specimens from Tenerife have no coloured base. However, the pigments he used have apparently changed with the passage of time in some cases. It is particularly difficult to distinguish currently specimens from Gran Canaria ('dark indigo') from those collected in El Hierro ('lilac'). Other data, for example on numbers, dates of capture and distribution can often be obtained from Wollaston's publications. Catalogues, or registers, of species collected by Wollaston, with locality data, exist for the Madeiran beetles in both his BMNH and OUMNH collections (ISRAELSON 1991, MACHADO 2006), but there appear to be no equivalent documents for his Canarian ones.

### OUMNH Collection

Wollaston's Oxford collection of Canarian Coleoptera was purchased by subscription, principally by Rev. F. W. Hope, in 1861 (MACHADO 2006). It is housed in Wollaston's original cabinet and was apparently arranged by him. A 'flyer' pasted on the inside of the door records the list of donors and the fact that the purchase price was £300 (with another £200 paid for 'shells'). The collection is similar to that in BMNH, though with less type material, and consists, in most cases, of fewer examples of each species as compared with Wollaston's OUMNH Madeiran collection. Both series form part of the Hope Entomological Collections and are housed in the University of Oxford's Museum of Natural History.

As with the BMNH collection, the insects in Wollaston's OUMNH collection are colour-coded at the base of the card mounts, the code being the same in both collections. And, as in that collection, it is difficult currently to distinguish specimens colour-coded for Gran Canaria and El Hierro, though the descriptions are somewhat different: Gran Canaria – Blue ('dark indigo' in BMNH); El Hierro – Purple ('lilac' in BMNH).

### Keys to genera and species of Canarian Apionidae

- 1 Legs entirely black. .... 2
- Legs entirely, or in great part, red, yellow or orange. .... 12
- 2 Elytra with coarse, erect, white setae, usually on all interstices but occasionally on the odd-numbered elytral interstices only (even-numbered interstices with similar but semi-recumbent setae); antennal club very short, scarcely longer than broad; tarsal claws with long, slender appendices; on *Cistus*. .... *Phrissotrichum* Schilsky, 1901 (Fig. 2)
- Elytra without coarse, erect, white setae; clothing of fine hair-like setae only, or elytra glabrous; antennal club longer, at least twice as long as broad; tarsal claws with short, broad appendices or appendices wanting. .... 3
- 3 Elytra shorter, about 1.4× as long as broad, broadest behind middle, sides in anterior half straight, divergent posteriad; mainly on *Vicia* and *Lotus* spp. .... 4
- Elytra longer, more than 1.5× as long as broad, sides rounded in anterior half. .... 5
- 4 Greenish-brassy, metallic; pronotum larger, rounded at sides and more coarsely punctured; on *Lotus* spp. ....
- .....*Hemitrichapion* Voss, 1959 (sg. *Lotapion* Alonso-Zarazaga, 1990a) (Fig. 10)

- Black, with a bluish or purplish reflection, not metallic; pronotum smaller, almost parallel-sided, and less coarsely punctured; mainly on *Vicia* spp. ....  
..... **Holotrichapion** Györfy, 1956 (sg. **Nesiapion** Alonso-Zarazaga, 1990a)
- 5 Rostrum with conspicuous semi-erect setae on dorsal and ventral surfaces; pronotum with a fine line, or impression, from base to apex; on *Ononis*. ....  
..... **Holotrichapion** Györfy, 1956 (sg. **Holotrichapion** s. str.)
- Rostrum glabrous, or at least without semi-erect setae on either dorsal or ventral surface; pronotum with a short impression at base only. .... 6
- 6 Elytra depressed on disc, with strong microsculpture; rostrum less strongly curved, almost straight; legs shorter and more robust; on *Rumex*. .... **Perapion** Wagner, 1907 (Fig. 1)
- Elytra rounded on disc, microsculpture, if present, less conspicuous; rostrum more strongly curved; legs longer and more delicate. .... 7
- 7 Scutellum with two carinae at base; on Malvaceae. ....  
..... **Aspidapion** Schilsky, 1901 (Figs. 3-4)
- Scutellum without carinae. .... 8
- 8 Antennae inserted within basal third of rostrum; tarsal claws without appendices. .... 9
- Antennae inserted at about middle of rostrum; tarsal claws with appendices. .... 10
- 9 Rostrum with a dilation, or indistinct tooth, at each side on which the antennae are inserted (best seen in dorso-lateral view); rostrum more robust, broader than fore-tibia; head not grooved between eyes; on *Carduus*. .... **Ceratapion** Schilsky, 1901 (Fig. 5)
- Rostrum without a tooth, more delicate, about as broad as fore-tibia; head grooved between eyes; on *Argyranthemum*. .... **Diplapion** Reitter, 1916 (Fig. 6)
- 10 Antennal scape yellow; club fusiform, inconspicuous; rostrum slightly subulate; first tarsomere of hind-leg as long as (male), or nearly as long as (female), remainder of tarsus; on *Vicia* etc. .... **Eutrichapion** Reitter, 1916
- Antennal scape black; club oval, conspicuous; rostrum cylindrical; first tarsomere of hind-leg much shorter than remainder of tarsus. .... 11
- 11 First tarsomere of each leg less than twice as long as broad; sub-basal thoracic fossa deep; on *Trifolium*. .... **Catapion** Schilsky, 1906 (Figs. 12-13)
- First tarsomere of each leg twice (or more) as long as broad; sub-basal thoracic fossa shallow; on *Lotus* and *Trifolium*. .... **Ischnopterapion** Bokor, 1923
- 12 Dorsal surface completely, or almost completely, covered with broad, short-oval to long-oval, whitish, appressed scales; on Fabaceae. .... **Lepidapion** Schilsky, 1906 (Fig. 7)
- Dorsal surface without broad scales, but with linear scales which incompletely cover the elytra and form a pattern on them; on Urticaceae and *Mercurialis*. .... 13
- 13 Rostrum black; elytra with sparse, recumbent, whitish pubescence on predominantly black derm and with a roughly circular bare area on disc; on *Mercurialis*. ....  
..... **Kalcapion** Schilsky, 1906
- Rostrum red; elytra with whitish and black pubescence, or scale-like setae, which form indistinct transverse bands on predominantly reddish derm; on Urticaceae. ....  
..... **Taeniapion** Schilsky, 1906 (Figs. 8–9)

***Perapion* Wagner, 1907**

One species. A depressed, oblong-oval weevil, length 2.4–3.2 mm; elytra somewhat brassy, rostrum only feebly curved. .... *P. fallax* (Wollaston, 1864) (Fig. 1)

Male rostrum shorter, about as long as pronotum, and duller, more strongly and closely punctured; first segment of hind tarsus with an inwardly-projecting tooth. Female rostrum longer, much longer than pronotum, and more shining, less strongly and closely punctured; first segment of hind tarsus without a tooth.

***Phrissotrichum* Schilsky, 1901**

One species. A distinctive, ‘bristly’ species with a pronounced brassy reflection, length 1.5–2.4 mm. .... *P. tubuliferum* (Wollaston, 1864) (Fig. 2)

Male rostrum shorter, about as long as pronotum. Female rostrum longer, as long as, or longer than, head and pronotum combined.

***Aspidapion* Schilsky, 1901**

1 Dark brown, with bronze reflection; more robust, body about 2.25× as long as broad; eyes more prominent, circular in lateral view; pronotum transverse; length 1.9–2.9 mm; very local species (Tenerife only); on *Lavatera acerifolia*. ....  
..... *A. acerifoliae* Suppantshitsch, 1996 (Fig. 3)

Male fore-tibia strongly bent inwards and with a mucro, rostrum more robust.  
Female fore-tibia almost straight, unarmed at apex, rostrum more slender.

– Black, with metallic reflection; more slender, body 2.35–2.45× as long as broad; eyes less prominent, oval in lateral view; pronotum quadrate; length 2.0–2.7 mm; very common, on all islands; on *Malva* and *Lavatera* spp. ....  
..... *A. radiolus* (Marsham, 1802) ssp. *chalybeipenne* (Wollaston, 1854) (Fig. 4)

Male fore-tibia strongly bent inwards and with a mucro, rostrum more robust.  
Female fore-tibia almost straight, unarmed at apex, rostrum more slender.

***Ceratapion* Schilsky, 1901**

One species. A blue-black weevil, with two small patches of whitish pubescence at elytral base on either side of scutellum. The dilation of the rostrum (or tooth) characteristic of the genus is not well-developed in this species. Length 2.0–2.5 mm; on *Carduus* etc. ....  
..... *C. calcaratum* (Wollaston, 1864) (Fig. 5)

Male fore-tibia curved inwards at apex and with a subapical tooth; first metatarsomere with an inwardly-pointing tooth or spur. Female fore-tibia almost straight at apex, unarmed; first metatarsomere unarmed.

***Diplapion* Reitter, 1916**

One species. A delicate weevil, length 1.4–1.9 mm. Elytra with whitish to cream pubescence, thicker and more conspicuous basad, especially on third elytral interstice; on *Argyranthemum*. ..... ***D. westwoodi*** (Wollaston, 1864) (Fig. 6)

Male first metatarsomere with an inwardly-pointing tooth or spur. Female first metatarsomere unarmed.

***Lepidapion* Schilsky, 1906, sg. *Hidryocneme* Alonso-Zarazaga, 1990**

- 1 Elytra bluntly rounded at apex, less acuminate; whitish scales of pronotum almost circular, or short-oval, less than twice as long as broad [average size smaller, 1.2–1.8 mm]. ..... ***L. (H.) senex*** (Wollaston, 1864) (Fig. 7).

Male rostrum about as long as pronotum, less strongly curved. Female rostrum longer than pronotum, more strongly curved.

- Elytra less bluntly rounded at apex, more acuminate; whitish scales of pronotum linear, pointed at apex, at least twice as long as broad [average size larger, 1.3–2.2 mm]. ..... 2
- 2 Elytra with long, fine, erect, hair-like setae, as well as recumbent, apressed scales [length 1.3–2.2 mm]. ..... ***L. (H.) spartocytisi*** (Marshall, 1928)

Male rostrum shorter than pronotum or antenna, paler (light yellow-orange). Female rostrum longer than pronotum or antenna, darker (orange to brownish).

- Elytra without erect, hair-like setae, clothed with apressed scales only [length 1.3–2.2 mm]. ..... ***L. (H.) curvipilosum*** (Wagner, 1908)

Secondary sexual differences as in *L. spartocytisi*.

***Kalcapion* Schilsky, 1906**

- 1 Legs entirely red to yellow [length 1.4–1.9 mm]. ..... ***K. semivittatum semivittatum*** (Gyllenhal, 1833)

Male rostrum shorter than pronotum, pubescent and dull. Female rostrum longer than pronotum, glabrous (or nearly so) and shining.

- Legs with femora infuscated to black, at least apicad [length 1.4–1.7 mm]. ..... ***K. semivittatum fortunatum*** (Roudier, 1963)

Secondary sexual differences as in *K. s. semivittatum*.

***Taeniapion* Schilsky, 1906**

- 1 Rostrum strongly curved (expanded ventrad in male), parallel-sided; more robust species, elytra broader, more strongly rounded at sides; tarsal claws with small, but distinct, appendices [length 1.3–2.0 mm]. ..... ***T. delicatulum*** (Wollaston, 1857) (Fig. 9)



Male rostrum about as long as pronotum, thicker, more pubescent, and duller.  
 Female rostrum much longer than pronotum, more delicate, less pubescent and more shining.

- Rostrum almost straight, very slightly curved, slightly subulate; more delicate species, elytra narrower, less strongly rounded at sides; tarsal claws without appendices [length 1.3–1.8 mm]. ..... *T. atlanticum* (Uyttenboogaart, 1935) (Fig. 8)

Male rostrum slightly shorter than pronotum, strongly pubescent, dull. Female rostrum much longer than pronotum, with sparse pubescence, strongly shining.

### ***Eutrichapion* Reitter, 1916, sg., *Cnemapion* Bokor, 1923**

- One species. A blue-black weevil with exceptionally long legs; length 1.7–2.7 mm. ....  
 ..... *E. (C.) vorax* (Herbst, 1797)

Male fore-tibia expanded and bevelled (giving the appearance of being twisted); first three or four proximal antennomeres yellow; rostrum little longer than pronotum. Female fore-tibia simple; only first antennomere (scape) yellow; rostrum a little shorter than head and pronotum combined.

### ***Holotrichapion* Györffy, 1956**

- 1 Elytra shorter, about 1.4× as long as broad, broadest behind middle, sides in anterior half straight, divergent posteriad; pronotum with a short impressed line at base only, not extending to middle (see key to genera, 3); rostrum without semi-erect setae on dorsal and ventral surfaces; length 1.4–2.0 mm; predominantly on *Vicia*. ....  
 ..... *H. (Nesiapion) rotundipenne* (Wollaston, 1854) (Fig. 11)

Differences between sexes not marked. Male rostrum slightly shorter, not as long as pronotum, a little duller. Female rostrum slightly longer, about as long as pronotum, a little more shining.

- Elytra longer, more than 1.5× as long as broad, sides in anterior half rounded; pronotum with a shallow impressed line from base to apex (see key to genera, 4); rostrum with conspicuous semi-erect, brownish setae on dorsal and ventral surfaces; length 1.6–2.3 mm. .... *H. umbrinum* (Wollaston, 1864)

Male rostrum shorter, only slightly longer than pronotum. Female rostrum longer, nearly as long as head and pronotum combined.

### ***Hemitrichapion* Voss, 1959, sg., *Lotapion* Alonso-Zarazaga, 1990**

- One species. Greenish-brassy; pronotum rounded at sides, very coarsely and closely punctured, punctures very large, interspaces not shagreened; eyes flat; length 1.3–1.9 mm; on *Lotus*.  
 ..... *H. (L.) gomerense* Stüben & Behne, 2010 (Fig. 10).

Differences between sexes slight. Male rostrum a little shorter and duller compared to female rostrum.



**Catapion Schilsky, 1906**

- 1 Elytra long-oval, about 1.7× as long as broad; head flat or slightly convex between eyes; length 2.1 mm; one recorded Canarian specimen (La Gomera) only. ....  
..... *C. austrinum* (Wollaston, 1864) (Fig. 13)
- Elytra short-oval, about 1.5× as long as broad; head concave between eyes; length 1.4–1.9 mm; one recorded Canarian specimen (Tenerife) only. ....  
..... *C. pubescens* (Kirby, 1811) (Fig. 12)

Male rostrum much shorter than head and pronotum combined. Female rostrum about as long as head and pronotum combined.

**Ischnopteration Bokor, 1923**

- 1 Body very sparsely pubescent, almost glabrous, shining, blue-black or greenish-black; pronotum remotely and shallowly punctured; average size smaller 1.6–2.1 mm; on *Trifolium*. .... *I. (Chlorapion) Györfly, 1956) virens* (Herbst, 1797).

Male rostrum shorter and less strongly curved, only a little longer than pronotum.

Female rostrum longer and more strongly curved, as long as, or longer than, head and pronotum combined.

- Body moderately pubescent; pronotum closely, but rather shallowly, punctured; average size larger 1.7–2.2 mm; on *Lotus*. ***Ischnopteration s. str.*** ..... 2
  - 2 Pronotum less strongly transverse, about 0.9× as long as broad; elytra 1.35–1.40× as long as broad; slightly less brightly shining. .... *I. (I.) plumbeomicans* (Rosenhauer, 1856)
- Sexual differences not marked. Male rostrum only slightly longer than head and pronotum combined, antennae inserted nearer middle. Female rostrum more evidently longer than head and pronotum combined, antennae inserted a little nearer base.
- Pronotum more strongly transverse, about 0.8; elytra about 1.25× as long as broad, slightly more brightly shining. .... *I. (I.) sp.* (Fig. 14)

Sexual differences not marked, as in *I. (I.) plumbeomicans*.

**Taxonomy, ecology and distribution*****Perapion fallax* (Wollaston, 1864)**

(Fig. 1)

WOLLASTON (1864) described this species under the name *fallax*. The replacement name supplied by WARNER (1958) (*neofallax*) is unjustified. Wollaston commented on the species' similarity to the common European *P. violaceum* (Kirby, 1808), and BRITO & OROMÍ (1986) tabulated the differences between the two species. Like *P. violaceum*, *P. fallax* feeds as a larva in the stems of *Rumex* (*Rumex*) spp. ('docks'). BRITO & OROMÍ (1986) recorded it from *R. lunaria* (Tree Sorrel), but I have found it on that very common Canarian plant only in Gran

Canaria (in January 2004 at two sites) and in Lanzarote (in January 2005, also at two sites); it is possible that *R. lunaria* is only palatable as a host of the adults when its foliage is fresh and tender. *Perapion neofallax* occurred in some numbers on *R. conglomeratus* in Tenerife (March 2001) and La Palma (February 1998) and in both islands it also occurred on *Emex spinosa*. Larvae were found in stems of the latter plant in the Orotava Valley in March 1993. *Perapion fallax* has been recorded from all the islands; MACHADO & OROMÍ (2000) omitted it from La Gomera, but BRITO & OROMÍ (1986) included the record of a single example taken there by Lindberg. It is not restricted to the Canary Islands but has been found in North Africa and southern Spain (M. A. Alonso-Zarazaga, pers. comm.).

Wollaston's BMNH collection contains 4 male and 4 female specimens, from La Palma, Tenerife, Gran Canaria and Lanzarote. The example labelled 'Type' is a male and colour-coded for Lanzarote. 5 males and 4 females are in the OUMNH collection, from El Hierro, La Palma, Tenerife, Lanzarote and possibly Gran Canaria.

### ***Phrissotrichum tubuliferum* (Wollaston, 1864)**

(Fig. 2)

WOLLASTON (1864) originally assigned this species to *P. tubiferum* (Gyllenhal, 1833), having only four examples to study, but proposed the name *tubuliferum* if the two species were found to be distinct. This has been accepted by subsequent workers.

*Phrissotrichum tubuliferum* is generally a very common species which I have found on all the western islands. BRITO & OROMÍ (1986) cited only a record of Wollaston's from Gran Canaria, where it was particularly abundant and widespread (Tasarte, Tocodoman, Embalse del Mulato, Fataga and Artenara) in March 1994 and February 1997. BRITO & OROMÍ (1986) tabulated a number of differences (besides the much smaller size) between the endemic Canarian weevil and *P. tubiferum* (Gyllenhal, 1833). GURREA & SANZ (2000) included it as a Canarian endemic. However, *P. tubuliferum* appears to be associated only with *Cistus monspeliensis*, a common Mediterranean plant species, and not to occur on the endemic Canarian *C. symphytifolius*, perhaps suggesting a relatively recent and allopatric origin.

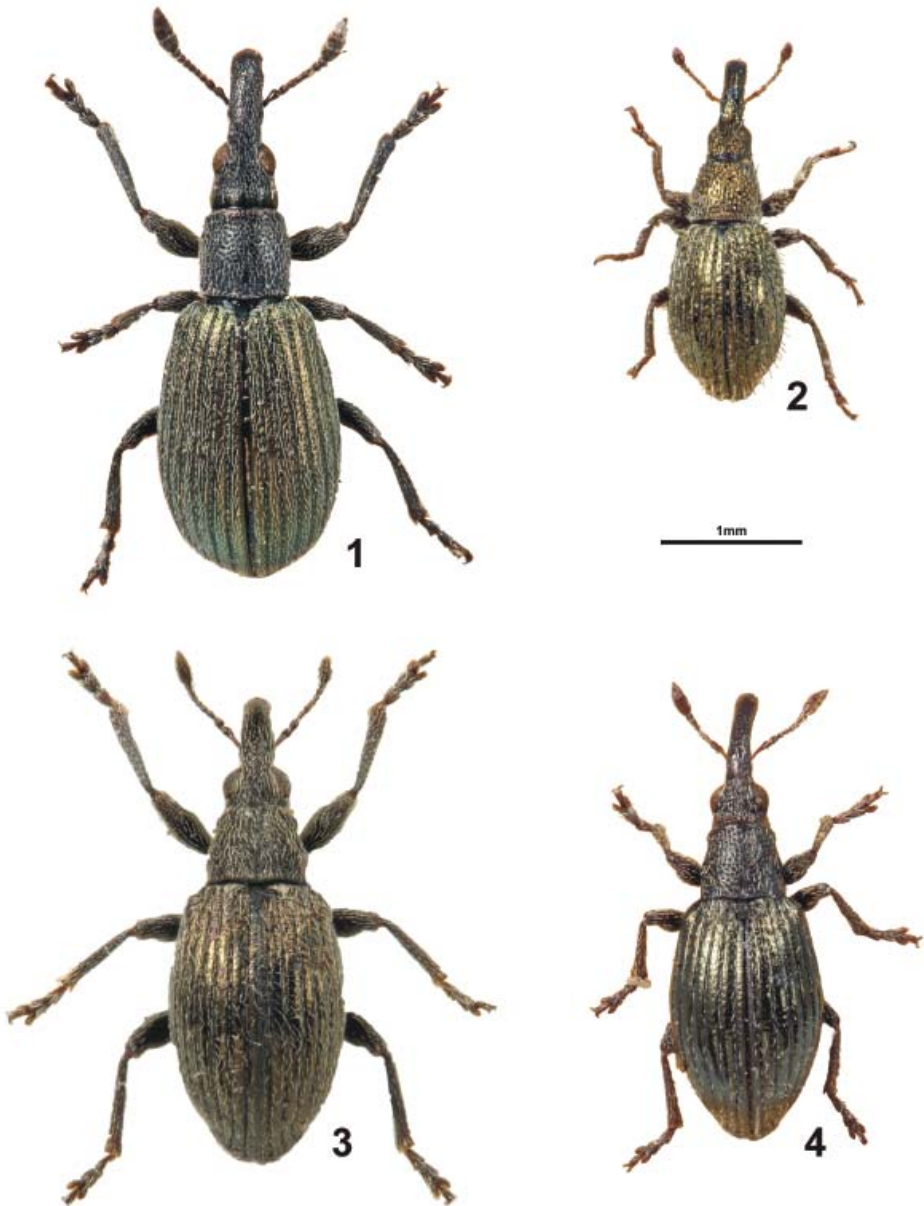
Only 2 males and 1 female are in Wollaston's BMNH collection. They stand under the name *Apion tubiferum* (not *tubuliferum*) and all are colour-coded for Gran Canaria. There is just a single male in the OUMNH collection, also from Gran Canaria. These are presumably the four specimens mentioned by WOLLASTON (1864).

### ***Aspidapion acerifoliae* Suppantschitsch, 1996**

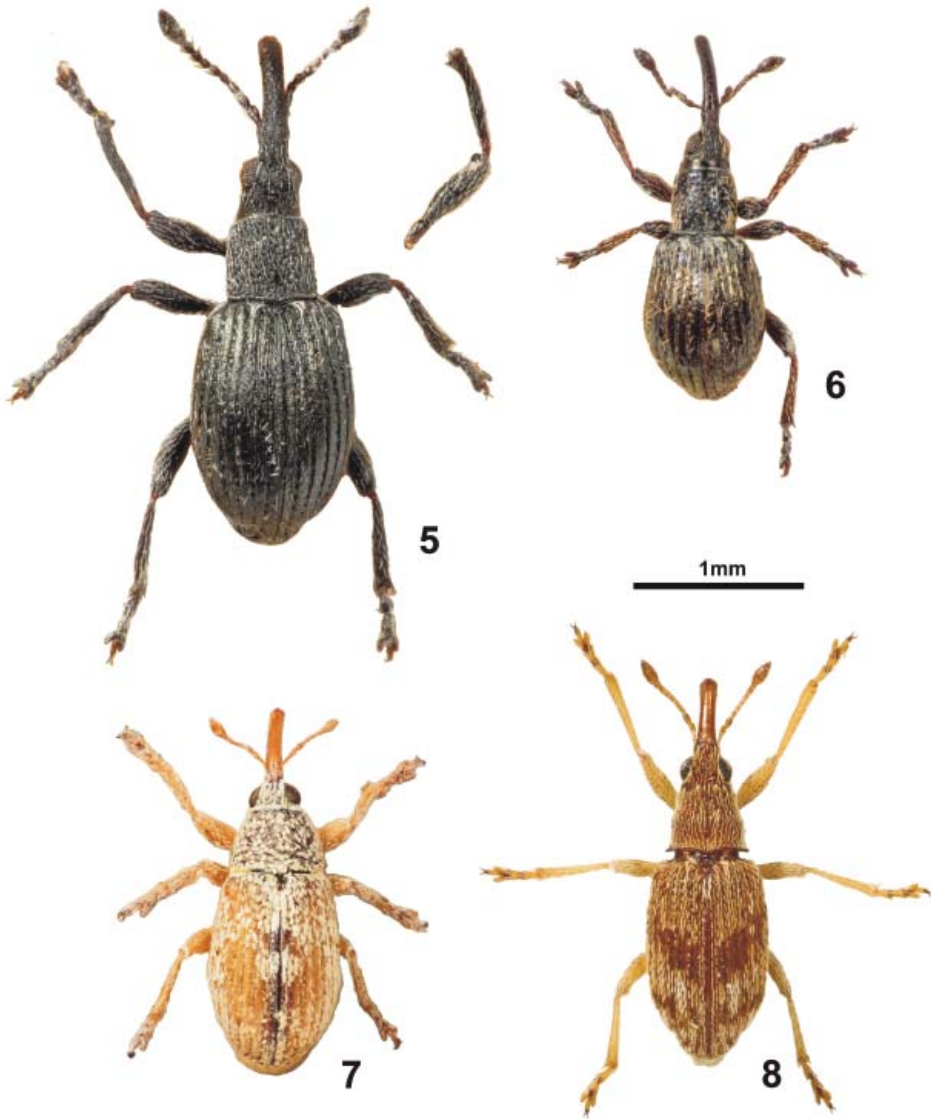
(Fig. 3)

Details of the occurrence of this recently described species are in SUPPANTSCHITSCH (1996). Although endemic to the Canaries the species was not included in GURREA & SANZ (2000).

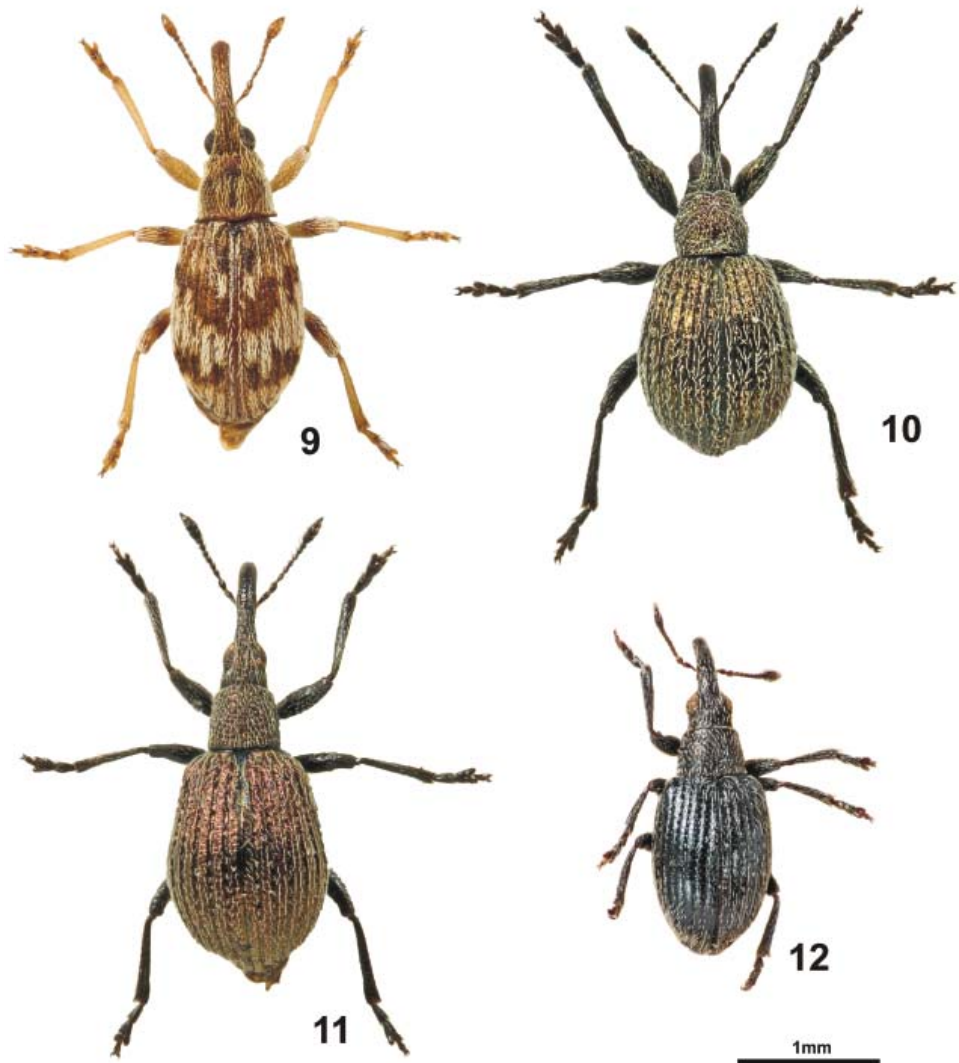
Mr. W. Suppantschitsch generously donated a pair of paratypes (male and female) of this species to BMNH, where they are incorporated in the Museum's General Collection, not in the separate Wollaston collection.



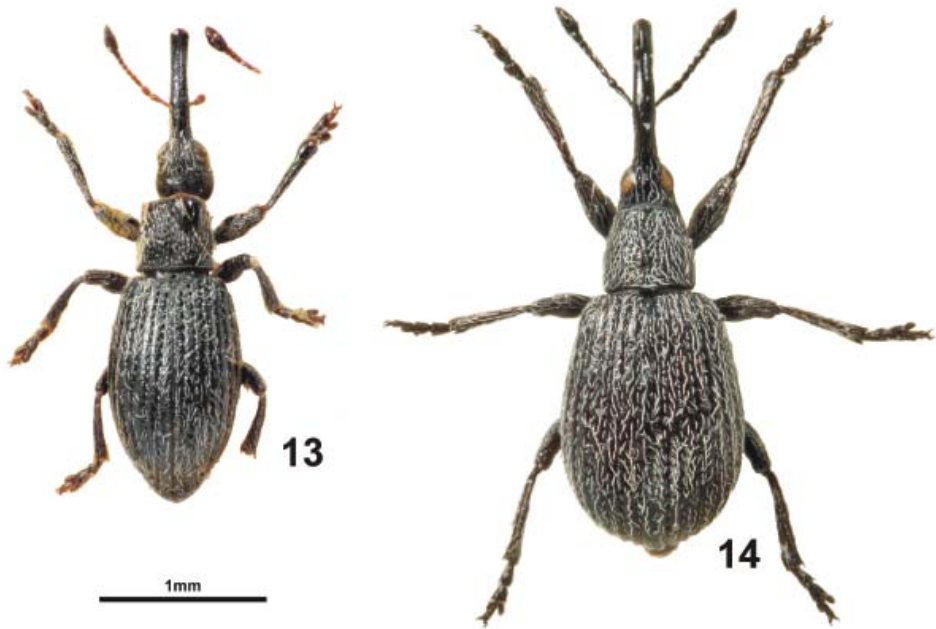
Figs. 1–4. Habitus of the Apionidae of Canary Islands. 1 – *Perapion fallax* (Wollaston, 1864), syntype, Wollaston Coll. (BMNH); 2 – *Phrissotrichum tubuliferum* (Wollaston, 1864), syntype, Wollaston Coll. (BMNH); 3 – *Aspidadion acerifoliae* Suppantitsch, 1996, author's Coll.; 4 – *Aspidadion radiolus chalybeipenne* (Wollaston, 1854), Wollaston Coll. (BMNH).



Figs. 5–8. Habitus of the Apionidae of Canary Islands. 5 – *Ceratapion calcaratum* (Wollaston, 1864), lectotype, Wollaston Coll. (BMNH); 6 – *Diplapion westwoodi* (Wollaston, 1864), paralectotype, Wollaston Coll. (BMNH); 7 – *Lepidapion senex* (Wollaston, 1864), lectotype, Wollaston Coll. (BMNH); 8 – *Taeniapion atlanticum* (Uytenboogaart, 1935), author's Coll.



Figs. 9–12. Habitus of the Apionidae of Canary Islands. 9 – *Taenipion delicatulum* (Wollaston, 1857), author's Coll.; 10 – *Hemitrichapion gomerense* Stüben & Behne, 2010, author's Coll.; 11 – *Holotrichapion rotundipenne* (Wollaston, 1854), author's Coll.; 12 – *Catapion pubescens* (Kirby, 1811), holotype of *Apion ceuthorhynchoides* Wollaston, 1864, Wollaston Coll. (BMNH).



Figs. 13–14. Habitus of the Apionidae of Canary Islands. 13 – *Catapion austrinum* (Wollaston, 1864), holotype, Wollaston Coll. (BMNH); 14 – *Ischnopterapion* sp., author's Coll.

***Aspidapion radiolus chalybeipenne* (Wollaston, 1854)**

(Fig. 4)

WOLLASTON (1854) described this taxon, as a species, from Madeira, utilising a manuscript name of Schoenherr's. Its status as a 'subspecies' is not entirely satisfactory, but has been accepted by most modern workers. It is very common and has been recorded from all the Canary islands. The usual host is *Malva parviflora*, but I have taken it at Guarozoca, Hierro, on *Lavatera arborea* (March 2001) and it has also occurred on *L. acerifolia*.

There are 2 males and 6 females in the main part of Wollaston's BMNH collection, from La Palma, Tenerife and Gran Canaria. A specimen labelled 'Type' is in his Madeiran collection, along with 14 other examples, including four of his 'var.  $\beta$ ' (WOLLASTON 1854). 4 males and 5 females are in the OUMNH series, from La Palma, El Hierro, Tenerife and Gran Canaria; there is also a substantial number in the OUMNH Madeiran collection.

***Ceratapion calcaratum* (Wollaston, 1864)**

(Fig. 5)

WOLLASTON (1864) described this species from the El Golfo region of Hierro and it has been recorded subsequently from Tenerife and Gran Canaria. The detailed records given by



LINDBERG & LINDBERG (1958), BRITO & OROMÍ (1986) and by GURREA & SANZ (2000) suggest that it has been taken (or at least recorded) only rarely and in very small numbers; however, WANAT (1995) added records from a number of sites in Tenerife and one in Gran Canaria, though again in small numbers. It was also recorded from Gran Canaria by ISRAELSON et al (1982) and from Tenerife by KÖSTLIN (1985). A strong colony in a restricted area at El Camino de Chasna, Tenerife, persisted since December 1993 and was still extant in November 2001, when last examined, despite having been devastated by goats on at least one occasion. The host at this site was tentatively identified as *Carduus pycnocephalus*. *Ceratapion calcaratum* also occurred (on young plants of a *Carduus* sp.) at Pista al Derrobado and El Salvador, Hierro, in January 2003. These appear to be the first examples recorded from the island since Wollaston's original discovery, as the species is not otherwise mentioned by FRANZ (1995) in his detailed account of the coleopterous fauna of El Hierro, nor by GURREA & SANZ (2000). In Gran Canaria in January 2004 *C. calcaratum* was common at three sites (Montaña de las Pilas; Las Lagunetas; Los Corrales); the hosts ('thistles') were in early stages of growth and consequently not identified.

Single male and female specimens from El Hierro represent this species in Wollaston's BMNH collection. The male is labelled 'Type' and 'Hololectotypus' (desig. Dr. M. A. Alonso-Zarazaga, 1986). The female is labelled 'Paralectotypus' with the same designation data. These designations were published by ALONSO-ZARAZAGA (1990b). The OUMNH series also includes a male and a female from El Hierro. WOLLASTON (1864) mentioned only four specimens, taken on that island, and presumably these were divided between the BMNH and OUMNH collections. If that is the case the OUMNH specimens are the two syntypes the whereabouts of which ALONSO-ZARAZAGA (1990b) was unable to ascertain.

### *Diplapion westwoodi* (Wollaston, 1864)

(Fig. 6)

There seem to have been no published records of this species, which has been found only in Gran Canaria, since Wollaston's original discovery in 1858 (WOLLASTON 1864). No further records were given by LINDBERG & LINDBERG (1958), by BRITO & OROMÍ (1986) nor by GURREA & SANZ (2000), while WANAT (1995) was able to examine only one individual in addition to the type material. Apart from its origin in Gran Canaria, and current location, data on this specimen were not given. However, Mr A. P. Fowles (pers. comm.) took *D. westwoodi* in the Roque Noble area on 4 January 1995. I found one female specimen there on 26 February 1997, but the weevil was abundant near La Yedra on 1 March 1997 and again on 13 November 1999. My specimens all came from an unidentified species of *Argyranthemum* and it is assumed that this is the host, other species of *Diplapion* being also associated with Asteroideae-Anthemideae (Asteraceae) (ALONSO-ZARAZAGA 1990a). In January 2004 *D. westwoodi* was found to be abundant in Gran Canaria. It was recorded from seven separate sites in the central part of the island (Lomo Mangrera, near Cruz de Tejada, Hoya de la Montaña, Las Lagunetas, El Portillo, Montaña de las Pilas, Ariñez) and was particularly numerous at the first site. It is surprising that the species has been previously regarded as rare. The host, in every case, was *Argyranthemum adauctum* ssp. *canariense*, identified by elimination and from distributional



data in BRAMWELL & BRAMWELL (1974) rather than structural characteristics, as fruits were not present at this time of year. *Argyranthemum*, which is a very speciose genus, has representatives in other Canarian islands (and a few in other parts of Macaronesia), including other subspecies of *A. adauctum*, so that it is possible that *D. westwoodi* occurs elsewhere in the Canaries. It is known from Tenerife (M. A. Alonso-Zarazaga, *in litt.*).

There are 2 male and 2 female specimens in Wollaston's BMNH collection. One male is labelled 'lectotype' (desig. Dr. M. Wanat, 15.04.1986) and one female 'paralectotype' with the same designation data; this latter specimen also bears a 'Type' label. The lectotype and paralectotype designations were published by WANAT (1995). All the specimens are, of course, from Gran Canaria. Although there is a female example of *D. westwoodi* (with labels 'det. Wagner' and 'det. Wanat') in the BMNH General Collection labelled 'Madeira', this is evidently an error by some subsequent worker, as the card on which the specimen is mounted bears the 'dark indigo' colour at its base, indicating that it is an original Wollaston specimen from Gran Canaria. There are 4 male and 5 female specimens from Gran Canaria in the OUMNH series.

### *Lepidapion curvipilosum* (Wagner, 1908)

This is a common species throughout the western islands (in all of which I have found it), occurring especially on *Chamaecytisus proliferus*, a particularly abundant Canarian plant. It is perhaps surprising that Wollaston did not find this species.

### *Lepidapion senex* (Wollaston, 1864)

(Fig. 7)

*Apion senex* Wollaston, 1864: 306. LECTOTYPE (here designated): ♀, coloured base on mounting card indicates 'La Palma'. Labels: Lectotype / *Apion senex* Wollaston, 1864 / M.G. Morris des. 2010. (BMNH).

*Apion* (*Lepidapion*) *canariense* Wagner, 1914, **syn. nov.**

MARSHALL (1928) synonymised this species with *L. cretaceum* (Rosenhauer, 1856), a common Mediterranean species, and he was followed by LINDBERG & LINDBERG (1958) and BRITO & OROMÍ (1986). *Lepidapion senex* is currently regarded as a good species (ALONSO-ZARAZAGA 1990a, MACHADO & OROMÍ 2000) and it has been recorded from La Palma, La Gomera and Gran Canaria.

However, examination of Wollaston's only two specimens (syntypes) of *L. senex* (a female in each of the BMNH and OUMNH collections) shows them to be conspecific with *L. canariense* (Wagner, 1914). It would appear that the incorrect synonymising (MARSHALL 1928) of *L. senex* with *L. cretaceum* has led subsequent authors to regard *L. senex* and *L. canariense* as distinct. In their key BRITO & OROMÍ (1986) distinguished *L. canariense* from *L. cretaceum* (then thought to be conspecific with *L. senex*) on characters of the scutellum. The single large tubercle which the scutellum bears is certainly characteristic of *L. cretaceum*, but the double tubercle (which is also subbasal, not central) is characteristic of Wollaston's two specimens as well as a long series of *L. 'canariense'* in the current author's collection. The scutellum of *L. senex* (*canariense*) is raised at apex but flat in *L. cretaceum*. *Lepidapion senex* also differs from *L. cretaceum* in having much less acuminate elytra and being smaller on average. WAGNER (1914), in describing *Apion* (*Lepidapion*) *canariense*, compared his species with *A. acumina-*

*tum* Schilsky, 1906 and *A. curvipilosum* Wagner, 1908, but not with *A. senex*, which, in view of the only two Wollaston specimens being in British collections, he almost certainly did not see. The characters of the scutellum were not mentioned in Wagner's description. Based on this evidence, *Lepidapion canariense* is here regarded as a junior synonym of *L. senex*.

LINDBERG & LINDBERG (1958), BRITO & OROMÍ (1986) and GURREA & SANZ (2000) associated *L. canariense* especially with the Valle de Masca – Teno Alto area of Tenerife, but it is rather more widely distributed, occurring at Santiago del Teide (February 1998 and June 2001) and below Tamaimo (December 1995). It is also known from La Palma (MACHADO & OROMÍ 2000) where I have found it abundantly (Las Indias, Montaña de Abraham, Jeday, La Caldareta, and Roque Faro, February – March 1998); Punta Sta. Lucia and Las Caletas, June 2001). Specimens taken at Epina, La Gomera, 19 December 1995, 10 January 2003 and 27 April 2008 constitute a new record for that island. The host is *Retama raetam*, larvae feeding on the seeds. This plant has been recorded from all the islands except Fuerteventura, and as the weevil seems to occur wherever there is an abundance of the host it is likely to be widespread throughout the Canaries. As stated above, all these records must now be referred to *L. senex*.

It is perhaps surprising that Wollaston should have taken only two specimens of *L. senex*, and it may be that these were stragglers, since the species is usually common on its host. Be that as it may, his only specimens are the two females already mentioned, one in each of the BMNH and OUMNH collections. In order to fix the identity of the species the BMNH specimen is hereby designated the lectotype of *Apion senex* Wollaston, 1864, and it has been so labelled (see above). In referring to what are presumably these two specimens WOLLASTON (1864) stated that they were taken by him 'on the mountains above Sta Cruz, in the island of Palma, during May 1858'; the specimens themselves are unlabelled.

### ***Lepidapion spartocytisi* (Marshall, 1928)**

BRITO & OROMÍ (1986) stated that this species is abundant in Gran Canaria but they referred to fewer than 20 examples in their section on localities; however they also referred to April as the month of abundance, and numbers may vary seasonally. The weevil has been recorded from Tenerife (GARCÍA 1991, GURREA & SANZ 2000, MACHADO & OROMÍ 2000) (the last publication gives the author of the species incorrectly as 'Marsham'). It has also been recorded from La Palma (GARCÍA 2003). My Gran Canarian records from Acusa (February 1997) and Tinguada (13 November 1999) are of specimens taken with *L. curvipilosum* on *Chamaecytisus proliferus* and examples from La Yedra occurred on *Argyranthemum* sp. growing close to that plant.

Although Wollaston did not know this species, Marshall's type material is placed with Wollaston's collection in BMNH (in a drawer containing 'supplementary' material, as noted above). It consists of a male, labelled 'Type', and a female labelled 'Co-type'.

### ***Kalcapion semivittatum fortunatum* (Roudier, 1963)**

WOLLASTON (1854) described a species of *Apion* from Madeira as *A. sagittiferum*, and regarded specimens taken in the Canaries as conspecific (WOLLASTON 1864). However, ROU-

DIER (1963) found the Madeiran and Canarian taxa to be distinct, regarding both of them as distinct subspecies of *K. semivittatum* (Gyllenhal, 1833).

*Kalcapion s. fortunatum* is one of the commonest Canarian Apionidae, occurring in abundance in all the western islands both on, and away from, its host, *Mercurialis annua*. A detailed list of localities is given by GURREA & SANZ (2000).

Wollaston's main BMNH collection includes 3 males and 5 females, with representatives from all the western islands. His OUMNH series includes 2 males and 6 females specimens from El Hierro, La Palma and Tenerife. Few of these have the femora darkened characteristically for the subspecies, and a female with pale femora from Fuerteventura is included; it should be referred to *K. s. semivittatum*. The material in both collections stands under the name *Apion sagittiferum* Woll.

### ***Kalcapion semivittatum semivittatum* (Gyllenhal, 1833)**

The nominate subspecies was recognised as distinct from his *Apion sagittiferum* by WOLLASTON (1864), who recorded examples from Lanzarote and Fuerteventura under the name *Apion germari* Walton, 1844, by which *K. semivittatum* was then known by British authors. He expressed doubt as to its distinctness from *Apion sagittiferum*. Whereas *K. s. fortunatum* occurs in all the western islands, the nominate subspecies, which is so common in Europe, is the one found in Lanzarote and Fuerteventura.

The 5 males and 2 females in Wollaston's BMNH collection come from these two islands and stand under the name *Apion germari* Walton. The same is true for 5 males and 4 females in the OUMNH series.

### ***Taeniapion atlanticum* (Uyttenboogaart, 1935)**

(Fig. 8)

It is surprising that WOLLASTON (1864) should have confused this species with the common British and European *T. urticarium* (Herbst, 1784) (= *vernale* Fabricius, 1792) as they are clearly distinct, *T. atlanticum* being more delicate, with the rostrum, in particular, finer, longer and straighter than that of *T. urticarium*. In fact, *T. atlanticum* is closer to *T. rufulum* (Wencker, 1864), though that species was probably not known to Wollaston as it was described only in 1864, and the similarity has not been remarked on by other workers. It is strange that UYTTEBOOGAART (1935) regarded the taxon as only a subspecies of *T. urticarium*. However, the genus *Taeniapion* is in need of revision and the status of Macaronesian species should be reassessed. *Taeniapion atlanticum* was reported to be 'extremely local in the Canaries' by WOLLASTON (1864, as *vernale*) and 'bastante rara' by BRITO & OROMÍ (1986); few records are listed by GURREA & SANZ (2000), implying that the species is indeed rare. This is in general my experience; I have recorded the weevil only at S. Juan de la Rambla, Tenerife, in March 1993 and at Las Corrales, near Teror, Gran Canaria in January 2004. In both cases it occurred in company with *T. delicatulum* and at the latter site the host was identified as *Urtica morifolia*. *Taeniapion atlanticum* has been recorded from Hierro as well as Gran Canaria, and FRANZ (1995) found it to be frequent 'in recent years' in Hierro, where I have worked for it in vain (although *T. delicatulum* was often abundant). WOLLASTON (1864) recorded *T. atlanticum* (as *Apion vernale*) from *Urtica urens*, but this is not the only urticaceous host.

FRANZ (1995) found the weevil on *Gesnouinia arborea*, interesting in that this is also an adult host of the weevil *Leiosoma apionides* (Wollaston, 1864), which is also found on *Urtica morifolia* (MORRIS 2004).

Wollaston's BMNH material consists of 1 male and 3 females from Tenerife and a male from El Hierro; 2 males and 3 females from Tenerife and a male from El Hierro are in his OUMNH series, indicating an almost exact division of his material between London and Oxford. The specimens stand under the name *Apion vernale* F.

### ***Taeniapion delicatulum* (Wollaston, 1857)**

(Fig. 9)

At a late stage in the preparation of this paper it became apparent that the Madeiran and Canarian populations of *T. delicatulum* might not be conspecific. However, as WOLLASTON (1864) considered them to be so, this issue is not addressed here. *Taeniapion delicatulum* is very clearly distinct from *T. atlanticum*, but is rather closer to (though also distinct from) the European *T. rufescens* (Gyllenhal, 1833), a similarity which was not remarked by Wollaston, but was noted by BRITO & OROMÍ (1986). The occurrence of its hosts, Canarian species of *Urtica* in particular being far less common than the ubiquitous *U. dioica* in Britain and western Europe generally, limits the distribution of *T. delicatulum*. However, the weevil is abundant where it occurs, recent experience being at odds with Wollaston's assessment of the species being 'apparently nowhere common'. It is distributed throughout the western islands. BRITO & OROMÍ (1986) included them all except Gran Canaria, while MACHADO & OROMÍ (2000) omitted Gomera (from which island it was recorded by 'the Messrs. Crotch' (WOLLASTON 1865)). Besides records from Tenerife, La Palma and El Hierro, I have taken the weevil in Gran Canaria (S. Bartolome, March 1994; Las Lagunetas, and Las Corrales, both in January 2004) and La Gomera (Chorros de Epina, December 1995; Las Hayas, January 2003). The hosts I have recorded are *Parietaria* sp. and, particularly, *Urtica morifolia*. WOLLASTON (1864) gave no host, but (1865) mentioned *Parietaria* on the authority of the Crotch brothers, who stated that it was peculiar to that plant on Gomera (which it certainly is not). BRITO & OROMÍ (1986) assumed Wollaston's *Parietaria* to be *P. debilis*. Like many other Apionidae, *T. delicatulum* is frequently found on vegetation other than its foodplants.

UYTTENBOOGAART (1935) described *Apion diverserostratum* as a new species, but later (UYTTENBOOGAART 1937) conceded (though somewhat ambiguously) that his material fell within the range of variation of *A. delicatulum*. This has been accepted by subsequent workers, for example LINDBERG & LINDBERG (1958), BRITO & OROMÍ (1986) and MACHADO & OROMÍ (2000), as well as the current author.

Wollaston's BMNH specimens include 4 males and 4 females, from El Hierro, La Palma and Tenerife, and in his OUMNH collection the species is represented by 2 males and 7 females from the same three islands.

### ***Eutrichapion vorax* (Herbst, 1797)**

WOLLASTON (1864) described this species as new under the species-group name *longipes*, but felt 'doubtful whether it should be treated as more than a slightly altered state' of *Apion vorax*. Subsequent authors have been in no doubt of its identity. It is fairly widely distributed

in the Canaries (La Palma, La Gomera, Tenerife) but not common. In Britain and western Europe it feeds as a larva in the flowers of species of *Vicia*, *Faba* etc. (e.g. COCKBAIN et al. 1982). However, like many other Apionidae, it is often found on trees and other plants which are not hosts; BRITO & OROMÍ (1986) gave the example of *Laurus azoricus*.

Wollaston's BMNH material consists of 3 males and 5 females, all from Tenerife. The specimen labelled 'Type' (i.e. of *Apion longipes* Wollaston) is a male. The OUMNH series consists of 5 males and 4 females, also all from Tenerife.

***Holotrichapion (Holotrichapion) umbrinum* (Wollaston, 1864)**

LINDBERG & LINDBERG (1958) and BRITO & OROMÍ (1986) referred to this species as *Apion ononis* Kirby, 1808, MACHADO & OROMÍ (2000) to *Holotrichapion ononis* (Kirby). However recent work has shown that Wollaston's species, *umbrinum*, is distinct and not conspecific with Kirby's *ononis*, a northern European species (M. A. Alonso-Zarazaga, pers. comm.). However, *H. umbrinum* is not endemic to the Canaries. The weevil has been recorded from all the western islands (MACHADO & OROMÍ 2000), but does not appear to be very common; BRITO & OROMÍ (1986) cited a number of localities, but the records are mostly of single individuals and they were able to examine only ten specimens. As they remarked, it appears to have been commoner in Wollaston's time. In Gran Canaria, the only island in which I have found it (Embalse del Mulato, March 1994; Degollada de Veneguera, February 1997; Tocodaman, November 1999; near El Risco, January 2004), it was associated with *Ononis angustissima*. A number of other species of *Ononis* occur in the Canaries, some of them being widely distributed.

Wollaston's BMNH collection contains 2 males and 1 female from Gran Canaria, and 1 male from La Palma; 5 males and 4 females in his OUMNH series include specimens from those two islands but also Tenerife. All stand under his name, *Apion umbrinum*.

***Holotrichapion (Nesiapion) rotundipenne* (Wollaston, 1854) stat. restit.**

(Fig. 11)

*Apion rotundipenne* Wollaston, 1854 is here resurrected as a valid species, *Holotrichapion (Nesiapion) rotundipenne* (Wollaston, 1854). This species is distinct from *Hemitrichapion (Lotapion) wollastoni* (Chevrolat, 1852). The confusion over *Holotrichapion rotundipenne* (Wollaston) and *Hemitrichapion wollastoni* (Chevrolat) is discussed below under the latter species.

WOLLASTON (1854, 1865) included both *Apion rotundipenne* and *Apion wollastoni* Chevrolat, 1852. He had described *A. rotundipenne* as new from Madeira (WOLLASTON 1854), and also gave an account of it in his first publication on Canarian Coleoptera (WOLLASTON 1864). Subsequent authors, including LINDBERG & LINDBERG (1958), have used the name *rotundipenne* Wollaston for this species and have not mentioned Chevrolat's *A. wollastoni* (as it is a Madeiran species). However, ALONSO-ZARAZAGA (1990a) formally synonymised the two names, with priority going to *A. wollastoni*. This action was based on the identity of two specimens in the Stockholm Museum ('typus' and 'paratypus'), examined by Alonso-Zarazaga (and separately by myself) which purport to be the type material of *A. wollastoni* and are certainly conspecific with *A. rotundipenne*. However, it is clear from WOLLASTON (1854) that his descriptions

(in both English and Latin) and coloured plates refer, correctly, to two distinct species that are currently not even regarded as congeneric. The specimens purporting to be Chevrolat's type material are clearly anomalous, not agreeing with Chevrolat's description, nor with the virtually contemporaneous ones of WOLLASTON (1854), and clearly do not belong to the type series of *A. wollastoni*.

Chevrolat's description of *A. wollastoni* (CHEVROLAT 1852) is reasonably detailed and includes characteristics which identify his species as a *Hemitrichapion* (*Lotapion*) as currently recognised. Additionally, specimens loaned from the Muséum National d'Histoire Naturelle, Paris, proved instead to be specimens of *Holotrichapion rotundipenne*.

BRITO & OROMÍ (1986) recognised that *Apion wollastoni* Chevrolat was distinct from *A. rotundipenne*. It should be noted that, presumably because of erroneous pagination in Chevrolat's account, WOLLASTON'S (1854, 1865) references to the description of *A. wollastoni* are incorrect; the correct citation is given in the References section below.

*Holotrichapion rotundipenne* is a very common species throughout the western islands (in all of which I have recorded it), in association with species of *Vicia*, *Lathyrus* and possibly other Fabaceae.

Six male and 2 female specimens are in Wollaston's main BMNH collection, with representatives from El Hierro, La Palma, Tenerife and Gran Canaria; 6 males and 3 females, from the same four islands, are in the OUMNH collection. They all stand under the name *Apion rotundipenne* Wollaston.

A lectotype designation of the specimen labelled as such by Alonso-Zarazaga in 1989 was never published. In order to fix the identity of the species a BMNH syntype is hereby designated the lectotype of *Apion rotundipenne* Wollaston, 1854, and has been so labelled:

LECTOTYPE (here designated): ♂ which bears four labels: (1) T. V. Wollaston / Collection / MADEIRA / BM1855-7 [printed] / Ribwiro Frio [MS]; (2) LECTOTYPUS / *Apion rotundipenne* / Wollaston 1854 / M. G. Morris des. 2011 [printed on red label]; (3) PARALECTOTYPE / *Apion Rotundipenne* Woll. [printed, reversed]; (4) PARA- / LECTO- / TYPE [Printed disc with blue margin, reversed]. The underside of the mounting card has handwritten number '178' indicating Ribiero Frio.

### **[*Hemitrichapion wollastoni* (Chevrolat, 1852)]**

This species was thought to occur in the Canaries but is now known only from Madeira, hence the use of square brackets above. It is included here because its relationship to *Holotrichapion rotundipenne* needs to be explained.

As noted under *Holotrichapion rotundipenne* above, Wollaston recognised this species as distinct, and recorded it from Madeira (WOLLASTON 1854, 1865). As also discussed above under *H. rotundipenne*, the synonymising of the two names appears to be based on the anomalous and alleged type material in Stockholm. At a late stage in the preparation of this paper, Peter Stüben (Curculio Institute, Mönchengladbach) located type material of this species at the Institut Royal des Sciences Naturelles de Belgique (IRSNB, Brussels). To fix the identity of the species and clarify its taxonomic status, given that supposed types of this species occur in more than one institute, include more than one taxon, and CHEVROLAT (1852) did not specify the number of specimens from which he described the species, it is desirable to designate a lectotype. The syntype from the IRSNB is accordingly designated here as lectotype:



LECTOTYPE (designated here by M. G. Morris & P. Stüben): The specimen bears five labels: (1) Coll. R. I. Sc. N. B. [printed] / Madere / Wollaston [MS] / Coll. Roelofs [printed]; (2) A. Wollastoni / Chevr. / Madère [printed]; (3) Type [printed]; (4) Hemitrichapion / wollastoni / (Chevrolat, 1852) / Vld.Stüben 2010 [printed] ; (5) LECTOTYPUS / Apion wollastoni / Chevrolat 1852 / desig. Morris & Stüben [printed on red label] (IRSNB).

The lectotype is mounted on a card that has an additional pinhole indicating repinning at some stage; the funicle of the left antenna is detached and glued separately to the card mount.

Although Recommendation 74D of the International Code of Zoological Nomenclature (ICZN 1999) suggests that ‘when possible, a lectotype should be chosen from syntypes... of the institution... containing the majority of that author’s types’, in this case Recommendation 74D does not best serve the interests of stability, since the purported type specimens in Stockholm do not fit the description, and their type status has been questioned (see above).

*Hemitrichapion wollastoni* is associated with species of *Lotus*; *Holotrichapion rotundipenne* has as known hosts *Vicia* and *Lathyrus* spp., also as mentioned above.

### ***Hemitrichapion gomerense* Stüben & Behne, 2010**

Until a late stage in the preparation of this paper this species was thought to be conspecific with *H. wollastoni*; it was described from La Gomera.

I found *H. gomerense* near Casa Blanca, Tenerife, in December 1995 on an unidentified *Lotus* sp. In Hierro it was abundant in the Arenas Blancas region in March 2001, but much less so in January 2003, when the host (a *Lotus* sp. provisionally identified as *L. glaucus*) was also less common. *Hemitrichapion gomerense* (as *wollastoni*) has also been taken in the Canaries by Mr. Suppantschitsch (pers. comm.). Three specimens of *H. gomerense* have recently been accessioned in BMNH; they bear data from Casa Blanca, Tenerife, leg. E. Colonnelli, and are dated 28.iii.1985. I found it abundantly on an unidentified species of *Lotus* at Epina, La Gomera, 27–29 April 2008. Some twenty species of *Lotus* have been recorded from the Canaries and the hosts of the new weevil may require considerable working-out.

### ***Catapion pubescens* (Kirby, 1811)**

(Fig. 12)

*Apion pubescens* Kirby, 1811: 350.

= *Apion ceuthorhynchoides* Wollaston, 1864: 314. HOLOTYPE (Fig. 12): ♂ (dissected), original labels: ‘Type’ and ‘*ceuthorhynchoides* Woll.’; a formal determination label has also been attached: ‘*Apion pubescens* Kirby = *Apion ceuthorhynchoides* Wollaston / det. M.G. Morris 2010’ (BMNH).

It is perhaps somewhat surprising that Wollaston, who had experience of the British fauna of Curculionoidea (MACHADO 2006), did not recognise his *Apion ceuthorhynchoides* Wollaston, 1864 as this species. LINDBERG & LINDBERG (1958), BRITO & OROMÍ (1986) and GURREA & SANZ (2000) included it under Wollaston’s name, none of these authors having been able to examine the unique Canarian example. The specimen, in BMNH, was correctly identified by DIECKMANN (1989) and his synonymy is here confirmed. Based on the study of the holotype of *Apion ceuthorhynchoides* Wollaston in the Wollaston Collection (BMNH) *Apion ceuthorhynchoides* Wollaston is regarded a junior synonym of *Catapion pubescens* (Kirby, 1811). This species apparently reached the Canary Islands but failed to become established.



***Catapion austrinum* (Wollaston, 1864)**

(Fig. 13)

DIECKMANN (1989) discussed the unique specimen of this species, which is in BMNH and which he examined, in considerable detail. He compared it with both *C. seniculus* (Kirby, 1808) and *C. corsicum* (Desbrochers, 1888) but was unable to decide whether it represented a good species or an anomalous example of some other one. The current author inclines to the view that it is an aberrant *C. seniculus*, but M. A. Alonso-Zarazaga strongly disagrees (*in litt.*); the specimen is not in very good condition and a definite decision may not be possible. At any event, the species is not, apparently, established in the Canaries. It was included as a Canarian endemic by GURREA & SANZ (2000).

The specimen bears a 'Type' label. The base of the card mount is coloured black or dark brown, hardly corresponding to the orange that should have indicated its Gomeran origin, and presumably the result of darkening with age.

***Ischnopterapion (Ischnopterapion) plumbeomicans* (Rosenhauer, 1856)**

This species was included as an inhabitant of the Canary Islands by MACHADO & OROMÍ (2000) on the basis of a record of *Apion westwoodi* in HEYDEN (1875) which was identified by M. A. Alonso-Zarazaga as referring to this species. Heyden referred to a dozen specimens taken at Tafira (C) on 22 April 1872. There are no other references to this record, the species being omitted from the accounts of LINDBERG & LINDBERG (1958) and BRITO & OROMÍ (1986).

***Ischnopterapion (Ischnopterapion) sp.***

(Fig. 14)

A species found abundantly in the Pinar de Chio region of Tenerife in June 1999 was thought to be *I. plumbeomicans*. However, M. A. Alonso-Zarazaga (*in litt.*) has pointed out that this identification is unlikely, as that species is monophagous on *Lotus creticus*. The weevils were shaken from moribund plants of a species of *Lotus* identified as *L. campylocladus*, and occurred with smaller numbers of *Tychius colonnellii* Caldara, 1991 (= *T. filirostris* Wollaston, 1854) (Curculionidae). W. Suppantisch (in litt.) has also taken this species and suggested that, as specimens differ somewhat from typical *I. plumbeomicans*, it may represent an undescribed species; further study is indicated. The same species also occurred in abundance on *Lotus spartioides* at Cortijo de la Tirma, Gran Canaria, in January 2004 and less abundantly on *Lotus* sp. at Epina, La Gomera, 27–29 April 2008 (current author's records).

***Ischnopterapion (Chlorapion) virens* (Herbst, 1797)**

This weevil was brought forward as a Canaries species by LINDBERG & LINDBERG (1958) on a single example collected in La Palma. There are records from La Palma, Tenerife and Gran Canaria (MACHADO & OROMÍ 2000), but the species does not seem to be common in the islands. BRITO & OROMÍ (1986) gave several records, mostly of singletons, but described it as 'abundant'. I have taken only one example myself, at El Camino de Chasna (Tenerife),

November 2001. In western Europe *I. virens* feeds mainly on *Trifolium* spp.; in Britain the host is usually *T. repens*, but this plant has been recorded only from Gran Canaria in the Canaries. BRITO & OROMÍ (1986) cited *T. campestre*, which occurs in all the islands, as a host; there are many other species of the genus in the Canary Islands.

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