

Stibia anomala Haw. A fresh male on August 23, my first in Dingle town.

Calocalpe undulata L. One, worn, on August 21. Only previously recorded in Kerry from Killarney.

Xanthorhoe ferrugata Clerck. The form with a bright purple band is not uncommon at Dingle and Inch. I have only once found it in England and it is local in Ireland. Greer used to go thirty miles from his home to Lough Fea to catch it. Why did Clerck call a moth which is never ferruginous "ferrugata"? Or has the name been changed because of an alleged type?

X. montanata Borkh. The fine mountain form was a little easier to get owing to the hot weather. I took one that was all liver and white bands. When I first saw it sitting on a heather clump I thought it was *Euclidimera mi* Clerck.

Entephria caesiata Schiff. A very dark one, unfortunately badly chipped, in the trap. I have never seen this moth in the hills as about Glengariff and Killarney.

Calostygia didymata L. On the Brandon range at about 2,500 feet this was black and grey; one which I took was almost all black. Donovan describes these insects as "very dark brownish black"; I think he must have been working from old specimens. There is not a trace of brown in those I took. I regarded them as one of the best catches of the trip.

Ecliptopera silaceata Schiff. Several in the trap. All I have seen in Ireland, at Glengariff, Killarney, Dingle and the Burren, have had the central band unbroken. In Kent and Essex I have found this form rare, say one in ten.

Crambus pascuellus L. Several flying round a wet piece of ground over 2,500 feet above sea level. Quite typical.

C. geniculeus Haw. A beautiful aberration suffused with red, on August 31.

Platyptillia calodactyla Hübn. Common this year in its restricted haunts; I refrained from taking any.

The collared dove has now taken up quarters at the back of Benners and is evidently breeding there. I heard its note every morning when I went to look at the trap. The Kerry County Council has placed a large litter trough on the edge of the car park at the Connor—anyone going there before 8 a.m. will see a pair of ravens and two or three pairs of choughs routing out crusts and sandwich ends, the choughs may be photographed with a little caution, the ravens are much more wary.

Two Additions to the British Species of *Atomaria* Steph. (Col., Cryptophagidae), with notes on others of the genus in Britain

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Atomaria reitteri Lövendal (1892, *Ent. Medd.*, 3: 252).

An exceptionally distinctive species by reason of its shape, which is more suggestive of (e.g.) *Corticaria crenulata* Gyll. than an *Atomaria*; pitchy-brown to black, elytra not or hardly lighter behind; antennal club, base of femora, tibiae except base, and onychium, all darkened. Antennae

moderate. Pronotum broad, greatest breadth before middle, whence the sides converge straightly and strongly to base; hind angles obtuse; basal margin straight. Elytra very elongate, *hardly broader than pronotum*, broadest before middle, sides very little rounded. Puncturation strong and moderately close. Length 1.5-1.7 mm.

As far as our fauna is concerned, this species, though nearest to *A. rhenana* Kr., differs from all others of the subgenus *Anchicera* in its longer and narrower form with pronotum very nearly as wide as elytra; these points give it more of the aspect of an *Atomaria* s.str., from any of which the quite different pronotal shape will at once separate it. The figure in Lohse (1967: 147) shows the elytra considerably too wide and rounded. That author (*l.c.*) records it as sparsely distributed and rare in the north of mid-Europe in marsh litter and on pond margins; it occurs also in Scandinavia.

A specimen which I obtained many years ago from the late W. H. Janson with the data 'near Cambridge, Dr. Crotch,' purporting to be *A. atra* Hbst. but lately found to agree with the descriptions of *A. reitteri*, was kindly confirmed by Dr. A. Strand (Oslo) as that species. I have since found two examples in the late Philip Harwood's collection at the Hope Department, Oxford University Museum, from Wicken Fen, Cambs. (10.xi.12, iv.25)—also doing duty as *A. atra*. Further, I have just learnt from Mr. Colin Johnson that he has found one or more specimens of *reitteri*—once again placed as *atra*!—in the H. Britten collection at Manchester, taken by the late Joseph Collins in a marshy place (famous for rare Coleoptera) at Yarnton, Oxon. This interesting addition to our list has, no doubt, been hitherto passed over partly through its rarity, and partly through having been mistaken by some for the much misunderstood *A. atra*.

Atomaria scutellaris Motschulsky (1849, *Bull. Mosc.*, **22** (3): 88).

Allied to both *A. fuscata* Schön. and *A. atricapilla* Steph., resembling the former in general build and the rather strongly, often angularly dilated sides of pronotum and broad, laterally well rounded elytra; and the latter in its often predominantly testaceous colour (rare in *fuscata*, unless immature). From *atricapilla*, and the allied *berolinensis* Kr., it differs in its much more ample form, much more transverse pronotum widest before instead of at middle, and elytra relatively wider; and from both (and more especially *fuscata*) by having the pronotum and basal half of elytra *similarly* rather finely and not thickly punctate—the punctures separated on an average by more than their diameter. Antennae long and slender, last segment twice as long as broad ($1\frac{1}{2}$ times in the species named above).

Typically, *A. scutellaris* further differs not only from these but from all other British *Atomariae* in coloration, being reddish-yellow with a broad band across the elytra darker (brown or blackish), leaving a large spot at each shoulder rather plainly, and the apical region more indeterminate, of the ground colour. The distinctness of the dark band, however, varies, and sometimes there is scarcely a trace of it; such specimens may be known from smallish *A. zetterstedtii* Zett. by the straight anterior tibiae, different puncturation, etc.

This is a south and west European species (Mediterranean and Atlantic), not known from the central parts of the continent except in the south-east, where, according to Lohse (1967: 146) it is rare on dry slopes; it probably lives in decaying vegetation. It occurs freely in the Canary Islands and

is perhaps the commonest *Atomaria* there (*teste* C. Johnson).

Recently in overhauling the genus in the Power collection at the British Museum (Nat. Hist.), it was seen that three specimens over the label *rhenana* Kr. clearly had nothing to do with that species and appeared to belong to one not known as British. Mr. Colin Johnson, to whom I pointed them out when we were both at the Museum a few days ago, was fortunately able to recognize them at once as *scutellaris* Motsch.—a species with which he was thoroughly conversant from foreign material. They were taken in the Scilly Islands by the late Dr. K. G. Blair (two bear the date vii.32). This locality, it will be noted, is fully in harmony with the known distribution of the species, and in fact Mr. Johnson was hoping to obtain evidence of its presence in the west of our area. It is—though not altogether unexpected—an interesting addition to the short list of 'specialities' of the Scillies, where most likely it is truly indigenous, and to the British fauna as a whole.

In the notes that follow I shall not be dealing with the genitalia, even though in critical cases they can have great diagnostic value—especially the male structures. They will doubtless be treated in the forthcoming Identification Handbook, which will, of course, give a revised key. The object of these notes is to point out and bring together the changes that have become necessary in our list since Kloet & Hincks' Check List (1945), and add anything that seems noteworthy, e.g. certain records, and in some cases a few details to facilitate recognition. On the taxonomic side, the recent ground-works are a paper by the late Dr. Oscar Sjöberg (1947), and a section by Dr. G. A. Lohse (1967) in the lately-commenced work on the beetles of mid-Europe. Mr. Colin Johnson (1966, 1967) has also made valuable contributions to the knowledge of our species, and the present notes owe not a little to helpful discussion with him. He has already (1967) dealt with part of the subgenus *Atomaria* s.str., so the bulk of my remarks will be concerned with the other subgenus, *Anchicera* Thoms.

A. (Anchicera) rhenana Kr.—This must be restored to our list as a good species, following Lohse (p. 147), and no longer placed as a variety of *A. gutta* Steph. as in our later literature. Though, as remarked by Fowler as long ago as 1889 (p. 341), the identity with Kraatz's insect is not proved (v. Sjöberg, p. 113-4), it certainly appears very likely. Should it be disproved, however, the species will take the name *godarti* Guillebeau (1885) which is definitely the present one, as also is *elevata* Allen (1938). It is somewhat variable in externals, especially in coloration, but may usually be recognized by its pronotum being strongly dilated in the middle, in conjunction with its rather highly arched elytra whose greatest width and height is well forward, relatively small size, and short antennae compared with such species as *basalis*, *fuscata*, or *berolinensis* (shorter also than in *gutta*, to which it is nearest in shape). The antennal club is said by both Sjöberg and Lohse to be sometimes darkened, but I have not seen this in British material. The elytra are generally paler in the apical half or more, but the whole insect may be pale. Fowler's remarks on the species appear justified, except that the thorax is only sometimes rufous (cf. also his key, p. 337); it is in fact more often black or dark.

While not common and perhaps very local, *A. rhenana* is by no means as rare as has been thought. It is chiefly associated with marshy places on or near the coast, or the banks of tidal rivers; it occurs too under cast-up

seaweed. I have it from Kent, Sussex, Isle of Wight and Dorset, and have seen it from Montgomery (flood refuse, A. M. Easton). No less than seven records, not all published, are for Sussex. There is a Norfolk record, and like some other largely maritime insects it appears to have occurred in the fens. In the series of the common *A. atricapilla* Steph. in the Power collection (British Museum) are four examples taken by him at Gravesend, which are light-coloured *rhenana*.

A. atra Hbst.—A little-known species which has been the subject of some confusion (see above under *A. reitteri*). Sjöberg (p. 112) considered that it might well be only a dark form of *rhenana*, but all he had seen were two females. However, Lohse (p. 148) describes and figures as *atra* a species which must be distinct and appears to agree with our British examples, and, like them, differs plainly from *rhenana*. The body is virtually all black, the pronotum relatively narrower or, at least, the sides only weakly dilated—and very convex behind, basal margin rather distinctly raised or reflexed in middle; from the species of the *apicalis/ruficornis* group, some of which it can resemble superficially, it may be known by the more convex pronotum slightly narrowed behind and with deeper basal channel, and by the short antennae having a slightly infuscated club.

A. atra, a marsh-dweller like the next three to be noticed, seems very rare on the Continent but rather less so in Britain if the records can be trusted. Some of them, however, not improbably relate to other species, such as dark forms of the last and the next two; and it should be noted that the series over this name in the Power collection consists of *A. borealis* Sjöb. (= *analisis* auct. Brit.), except for three specimens of the true *atra*: one from Wollaston with no data, the others from Cowley and Notting Hill. Fowler (p. 339) records one as taken by Waterhouse in Hammersmith Marshes—actually the same locality as the last-mentioned. A specimen sent by me (with other species) to Dr. Sjöberg, taken out of flood refuse from the river Wye at Hereford (ii.48), was returned by him as *A. atra*; and I have seen a similar one captured by Dr. A. M. Easton in a marsh at Lurgashall, Sussex. Further records are Wolvercote (J. J. Walker), Yarnton (J. Collins), both in Oxon. (*teste* C. J., coll. Manch. Mus.)

A. gutta Steph. and *A. mesomela* Hbst.* are so distinct in their typical state as to need no remark, but entirely black or dark forms can occur and then the small but constant diagnostic characters become critical. Both have longer antennae than the last two species. *Gutta* is shaped more like *rhenana* (a further distinction from *atra*), but, besides the more elongate antennae, their clubs are always well darkened; it is usually larger, more shining and often more diffusely punctured; the pronotum similarly broad as a rule but less bulging at sides, elytra less arched near base. *Mesomela* has several distinctive features beyond that of sharply bi-coloured elytra. The form is less convex than any of the preceding, the pronotum (strongly

*The name of this species has given much trouble; four versions are or have been current, in order of frequency *mesomelaena*, *mesomelas*, *mesomela*, and even *mesomelina*. The first would have been correct had Hebst written (*Dermestes*) *mesomelas*, but what he in fact wrote was the barbarism *D. mesomelus*. Unless, therefore, this be treated as a *lapsus* and corrected to *-melas* (fem. *-melaena*), it should be taken at its face value—hence *A. mesomela*, as in Kloet & Hincks, and adopted here.

bulging at sides) has its basal border plainly visible throughout and at least traces (often much more) of alutaceous ground-sculpture at base or near hind angles; antennae still longer than in *gutta*, the clubs only slightly if at all infuscata—often only towards apex—and *the apical tarsal segment plainly darkened above*, this being very characteristic.

A. basalis Er. (= *nitidula* auct., nec Heer).—This species requires notice on both synonymic and taxonomic grounds. As to the first, it now appears to be agreed that *nitidula* Heer—the prior and recently current name—is really a different insect (cf. Horton, 1951: 299); whereas there is no doubt concerning Erichson's name, much used in the earlier literature. As to the second, Sjöberg (p. 114) did not accept the species, failing to find any structural difference from *A. mesomela*. It appears very questionable, however, whether he can have had before him, in reaching that conclusion, the species known here under one or other of the above names, which is clearly the *basalis* Er. of Lohse—and the more so, because an example I sent to him was returned as *A. gutta* Steph., which certainly cannot be correct. Our British *basalis* resembles *mesomela* in a general way; but the boundary between the two colours on the elytra is not sharp, the form is rather longer, the pronotum (though broad) less strongly rounded, quite without alutaceous sculpture behind, and the basal border more developed medially than laterally; antennae rather stouter, they and the tarsi quite undarkened, but the femora appreciably browned towards the base. It is our largest species in the group, and one of our larger Atomariae. It varies less than *mesomela* and I do not know of an all-black form. Personally I have never met with the species, so it may be very local although widespread.

A. impressa Er.—This large and distinctive species is very scarce with us, the few published records being old; they are for the north of England (notably Scarborough where a number were taken by R. Lawson), but one was found by Dr. D. Sharp at Lee, Kent. Of more recent captures I can add one for Scotland: Nethy Bridge, Inv., viii.29, B. S. Williams, I ex. in coll. Harwood; and another for S. England: Foulness, in litter, ix.63 (C.M.J.), from a MS. list of Essex beetles by Mr. P. Hammond.

A. morio Kol.—Recorded in Britain from Windsor Forest only, where two specimens (apparently not several, as stated in *Ent. mon. Mag.*, 1929, p. 30) were taken in a jackdaw's nest in a fallen beech, 22.xi.28. It is of interest therefore that it was recaptured this year in a second locality: Monks Wood, Hunts., by Dr. Colin Welch (record published, but not at present available to me). The nidicolous habit would seem to be characteristic of the species. Kloet & Hincks give *versicolor* Er. as a questionable synonym, but according to Lohse it is another species — not however *versicolor* of British authors (see below under *A. gibbula*). The record just mentioned is now to hand: 1 at sap of cut stump, 1 in leaf litter at base of hollow ash, 1.iii.65 (Welch, 1968).—A.A.A., 24.xi.68.

A. lewisi Reitt.—This interesting colonist from the Far East, of which the first known European examples were taken in the writer's garden in 1937, is probably now spread over the whole of England and Scotland—if not Ireland too, though I have seen no Irish record. It has spread widely on the Continent also. Mr. Johnson has lately seen it from Brazil, etc.

A. zetterstedti Zett.—Besides the Oxford district, where it was first taken in Britain, this species, which is one of those with a restricted habitat (sallow catkins), has occurred further at Sunbury Island, Middx.

(Donisthorpe, Bedwell), Windsor (Donisthorpe), and Play Hatch near Reading (the writer). Collectors should note that the common and closely allied *A. fuscata* Schon. can occur with it, since pale specimens of the latter could easily pass as the present species. Apart from other small and comparative differences, *zetterstedti* can be known by the incurved front tibiae, these in *fuscata* being straight. The former, although perhaps very local, most likely occurs all along the Thames Valley between London and Oxford.

A. clavigera Gang.—Discovered recently by Mr. Colin Johnson at Carrington Moss, Cheshire, and introduced by him as British in 1966. It is much like a large, broad and dark *fuscata*, the elytral puncturation similarly fine, but that of the pronotum strong and close; the legs and antennal club black or dark. The latter (as the name implies) is very marked, with the two penultimate segments plainly transverse, the whole antenna shorter and stouter than in *fuscata*. I am grateful to my friend Mr. Johnson for a fine specimen of this interesting addition to our list.

A. berolinensis Kr.—As Sjöberg points out (p. 114-5), we must revert to this name—in use for many years—for the species which appears as *bicolor* Er. in our later literature, Wagner (1943) having studied Erichson's type of the latter and found it identical with *acutifrons* Gang. (non-British). In cases of doubtful separation from *atricapilla* Steph., which occasionally arise, it may be helpful to note that in *berolinensis* the lateral pronotal borders are visible (from directly above) only near the posterior angles instead of the whole basal half. Further, the species is brachypterous.

A. hislopi Woll.—The large deep-black *Atomaria* found rarely under grouse dung, etc., in northern localities, and hitherto known here as *gibbula* Er., must now take this name (given by Fowler as a synonym), since, as pointed out below, the true *gibbula* is another species. All the British records appear to be for Scotland except two—one of which, Scarborough (Lawson), is given by Fowler (p. 342). It is not generally known, however, that *hislopi* has occurred in Wales: mountains near Aberconway, Caerns. (W. E. Sharp, 1899). This record was omitted from the Supplement to Fowler's work (vol. 6).

A. gibbula Er. (*nec auct. Brit.*).—This is the *A. versicolor* Er. of our collections, the true species of that name being now recognised as a different one, not known from Britain (Lohse, p. 149). The former is rare or at least seldom recorded in this country, but might turn up more freely if its special biotope were more often examined. A specimen which I took from partly dry cow-dung in Windsor Park (iv.38) was returned as this species by Dr. Sjöberg, and Fowler (p. 344) gives for it a similar habitat. *A. gibbula* is readily known, in its group, by the unusually diffuse and not very fine puncturation; the humeral callosity is absent, the wings being undeveloped. I cannot, from the examples I have seen, agree with Fowler (*l.c.*) that it is larger than *apicalis* Er. It is near to *rubricollis* Bris., but the colouring is different and more uniform, the puncturation less fine, the pronotal pubescence longer and the elytra more convex. (Since this paper was written, Mr. Johnson's researches have thrown doubt on the identity of both *A. gibbula* Er. and *A. rhenana* Kr., which may invalidate current usage. The matter is under investigation by him.—A.A.A., 24.xi.68.)

A. rubricollis Bris.—A species with pronotum and (usually) humeri clear red, thus normally at once recognisable in the group with pronotum

scarcely contracted behind; in shape and size like a short *ruficornis* Marsh. According to the keys, the present species should have the pronotum alutaceous near the hind angles or more widely, but I can see no trace of it in my specimen—named for me by Dr. Sjöberg.* (In this portion of Sjöberg's key (p. 101) there appear to be one or two mistakes: under couplet 55, 2nd part, "Flügeldecken stärker als der Halsschild punktiert" and under 57 (*A. rubricollis*) "Halsschild . . . dicht punktiert" can hardly be right. Compare Lohse (p. 151) under the latter species: "Hsch. und Fld. weitläufig, Fld. manchmal . . . feiner punktiert" (my italics), which certainly seems correct. I mention these points partly to show how, in a difficult genus such as this, authorities often contradict one another!)

If the next species is not synonymous, the sole British record of *rubricollis* has remained up to now as published by me in 1952 for Windsor Forest—a single specimen off oak, 16.v.37. Recently, however, I detected one in the Power collection (set apart from the rest of the genus) labelled as taken by W. Lawson at Scarborough, Yorks.; it agrees precisely with the Windsor example.

A. divisa Rye.—Some years ago I was able to examine the unique type of this insect in Rye's collection (British, but locality unknown), without, unfortunately, being able to come to a definite conclusion about it. I was inclined to accept the current synonymy with *A. rubricollis* as *probably* correct; yet, if so, *divisa* is certainly based on a quite abnormal specimen. The differences of shape, stressed in the description, were evident—thorax broader, elytra less acuminate—but those said to exist in colour and puncturation were hardly noticeable. The problem, it seems, cannot be solved without a study of genitalia; or, should that prove inconclusive, a knowledge of the full range of variation in *A. rubricollis*.

A. borealis Sjöb. (= *analys* auct. Brit.).—Holdhaus in 1903 found that the *A. analis* of authors was divisible into a north and a south European race on aedeagal differences. This was confirmed by Sjöberg, who found a further constant character in the colour of the legs, which in the northern race—to which our insect belongs—are darkened, at least the femora and usually the tibiae also. The two forms are now treated as good species (e.g. by Lohse, p. 152), though regarded as subspecies by Sjöberg (p. 115).

A. (Atomaria s.str.) diluta Er.—This very rare northern species, at once recognisable within the subgenus by its peculiarly long and thick antennae, testaceous colour, and rectangular hind pronotal angles, is (without the slightest justification) omitted by Joy from his 'Practical Handbook' (1932)—though the equally scarce and restricted *A. procerula* Er. is included. Probably fewer than a dozen examples of *diluta* have occurred here, singly, most in Yorkshire and the Scottish Lowlands; and there is an Irish record. By far the latest capture known to me is of one (which I have seen) by Mr. E. Aubrook at Storthes Hall, Huddersfield, 13.iv.48.

A. wollastoni Sharp.—Likewise omitted by Joy and for no better reason. There are only a few British records, two being for northern Ireland; at least one is southern, but two specimens I once saw from the New Forest (J. J. Walker), supposed to be this species, were only *fuscicollis* Man.; they had been vouched for, I believe, by Champion. Consequently Walker's

*Mr. Johnson tells me that this criterion is of doubtful value, but that the micropterous condition is characteristic.

record of *wollastoni* for Marston, Oxon. (1921) appears suspect, particularly as the specimen was not to be found in his collection. It is probably another of the rare northern species with us, more frequent in Norway (v. Johnson, 1967: 43); its presence in central Europe is doubtful. I can add a new record for Scotland (the second only?): Balmuto, Fife-shire (Power, *ex* Janson); one example, 1870; in my collection. The *wollastoni* in Power's collection is a paratype of Sharp's, and the above specimen must have passed for something else; it was purchased with a pair of *umbrina* Gyll. from the same source. (Power's series of the latter from Balmuto proves to be half that species and half *fuscicollis*.)

It may be as well to mention the chief differences between the last-named species and *A. wollastoni*. Besides the most obvious one—basal pronotal groove not bounded by folds—the present species has a stouter funiculus but less marked club, much finer puncturation, very much finer and more decumbent pubescence (in *fuscicollis* rather coarse and raised, about as in *nigriventris* Steph.), almost parallel-sided pronotum with hind margin little longer than front, and no small reflexed humeral tooth.

A. fimetarii Hbst.—Of this fine species, the late H. Donisthorpe and I each swept a specimen on waste ground at Lampton, Middx., the date of mine being 30.v.47; and I have seen one taken several years ago in the Portsmouth district by Mr N. Holford. Both may be new county records.

A. barani Bris.—A very local species of which there are no additional records in Fowler & Donisthorpe (1913), that for Yarnton, Oxon. (J. Collins) having been passed over. Recent captures appear very few indeed, but my friend Dr. A. M. Easton took one in a *Typha* marsh (the usual British habitat) at Lurgashall, Sussex, a few years back. I have seen one record for the west of England, or perhaps Wales, but cannot at the moment trace its source. It is curious that the species seems to have a different habitat on the Continent, at least in some parts. Palm (1959: 265), who writes of it as very rare, states not only that he once took an example by sweeping in an old beech wood in Sweden, but also that it occurs elsewhere in fungus-infested trees; so that one rather wonders whether our insect is really the same species.

A. strandi Johnson (1967: 39, 45-6).—Mr C. Johnson has recently discovered that the *A. alpina* (earlier *elongatula*) of our lists is a new species, which he describes and names as above, and which is nearer to the continental *A. atrata* Reitt. than to *alpina* Heer. He has seen this new species also from Norway, taken by Dr. A. Strand.

A. proluxa Er.—Johnson (*op. cit.*: 39, 44-5) shows that this species must replace both *A. affinis* Sahlb. (formerly *badia* Er.) and *A. pulchra* Er. in our list. *A. proluxa* is widespread and varies in habitat, minor structural points, and colour.

A. sahlbergi Sjöb. and *A. bella* Reitt.—Two new British species closely allied to the last (v. Johnson, *op. cit.*), found very rarely in the Scottish Highlands, where, like certain other of the subgenus, they are associated with conifers; they may be confused in some of our collections with the last species.

Since Joy's 'Handbook' (1932) is still widely used for identification, it may be as well to point out that some of his colour-indications in this genus err so much on the side of pallor as to be decidedly misleading. It

is hard to understand, for instance, why he should describe the elytra of *A. impressa* as 'yellowish' when they are pitchy like the fore parts; on the other hand I much doubt whether *A. zetterstedt* is ever 'pitchy'—this rather suggests *fuscata*. Among other species he makes too light in colour are *fimetarii*, *umbrina* and *barani*, 'affinis-pulchra' (i.e. *prolixa*), and *nigriventris*. All are mainly dark when mature (apart, of course, from exceptional or certain old and bleached individuals; exceptions are commonest in *A. prolixa*).

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63 Blackheath Park, London, S.E.3. 29.x.68.

Notes and Observations

MID-OCTOBER BUTTERFLIES IN SOUTH DEVON—After a very windy and wet start to a few days at Hope Cove near Salcombe the morning of October 14th 1968 broke with a wealth of warm sunshine. Mr. J. Messenger and myself drove over to the shingle beach at the eastern end of Slapton Ley where there is a fine growth of valerian beneath the undercliff. Here we were joined by Mr. Geoffrey Cole who now lives at Slapton. All the butterflies of the neighbourhood seemed to be congregating in this spot. On one bower of ivy bloom we counted at least ten *Pyrameis atalanta* L. with an occasional *P. cardui* L. or *Polygonia c-album* L. to share the feast. *Aglais urticae* L. was about in small numbers, but *Colias croceus* Fourc. was the most interesting visitor, as few have been observed anywhere this year. We noted about half a dozen comprising both sexes. *Pieris rapae* L. was well to the fore together with a single *P. brassicae* L. An occasional *Lycaena phlaeas* L. was observed flitting about on the shingle. Mr. Cole had seen some *Pararge aegeria* L. in his garden just before he met us which makes a total of nine species for this autumn



Allen, Anthony Adrian. 1968. "Two additions to the British species of *Atomaria* Steph. (Col., Cryptophagidae), with notes on others of the genus in Britain." *The entomologist's record and journal of variation* 80, 318–326.

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