

EXPLANATION OF PLATES.

- Plate I. Male appendages of *Plebeius argus* (*argyrognomon*). Fig. 1, $\times 30$. Fig. 2, $\times 45$. Fig. 3, End of Clasp, $\times 90$. The specimen was from Cettinje.
- Plate II. Three specimens of appendages of *Plebeius ligurica* (*aegus*), $\times 30$.
- Plate III. Figs. 7 and 8, *Plebeius melissa*, and fig. 9, *P. micrargus*, $\times 30$.
- Plate IV. Appendages of *Plebeius sareptensis*, fig. 10, $\times 30$. fig. 11, $\times 45$. fig. 12, End of Claspers, $\times 90$.
- Plate V. *Androconia*, $\times 250$. fig. 13, *P. argus* var. *armoricana*. fig. 14, *Plebeius ligurica*.
- Plate VI. Undersides, $\times 4\frac{1}{2}$. fig. 15, *argus* var. *armoricana*. fig. 16, *argus* (from Lautaret). fig. 17, *P. ligurica* (*aegus*).
(To be continued.)

Some Notes on a Paper by Dr. Leach on Ants and Gnats in 1825.

By H. DONISTHORPE, F.Z.S., F.E.S.

My friend Mr. F. D. Morice called my attention to a paper by Dr. Leach, "Descriptions of Thirteen* Species of *Formica* and Three Species of *Culex*, found in the environs of Nice," [*Zool. Journ.*, 2, 289-98 (1825)], and asked me if I knew whether Leach's types were in the National Collection. Having obtained the volume of the *Zoological Journal* in question, I find that the species described are as under. Opposite each of Leach's names I give the identification of it suggested by v. Dalla Torre [*Cat. Hym.*, 7 (1893)]. The notes of exclamation signify that v. Dalla Torre was unable to ascertain to what species the insects in question really belonged.

LEACH.

v. DALLA TORRE.

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| 1. <i>Formica rubescens</i> (Fourmis roussâtre Huber). | <i>Polyergus rufescens</i> Latr. (1798). |
| 2. <i>Formica bicolor</i> . | " <i>Formica bicolor</i> Leach!" (1825). |
| 3. <i>Formica testaceipes</i> . | " <i>Formica testaceipes</i> Leach!" (1825). |
| 4. <i>Formica fusca</i> . | <i>Tetramorium caespitum</i> L. (1758). |
| 5. <i>Formica affinis</i> . | " <i>Formica affinis</i> Leach!" (1825). |
| 6. <i>Formica castanipes</i> . | <i>Camponotus sylvaticus</i> Olivier (1791). |
| 7. <i>Formica Huberiana</i> . | <i>Messor barbarus</i> L., v. <i>niger</i> André (1883). |
| 8. <i>Formica Nicaeensis</i> . | " <i>Formica nicaeensis</i> Leach!" (1825). |
| 9. <i>Formica haematocephala</i> . | <i>Cremastogaster scutellaris</i> Olivier (1791). |
| 9. <i>Formica rupestris</i> . | " <i>Formica rupestris</i> Leach!" (1825). |
| 10. <i>Formica Rediana</i> . | " <i>Formica rediana</i> Leach!" (1825). |
| 11. <i>Formica megacephala</i> . | <i>Messor barbarus</i> L. (1767). |
| 12. <i>Formica gigas</i> . | <i>Camponotus cruentatus</i> Latr. (1802). |
| 13. <i>Formica picea</i> . | <i>Camponotus lateralis</i> Ol., v. <i>picea</i> Leach (1825). |

1. *Culex Meridionalis*.
2. *Culex Nicaeensis*.
3. *Culex musicus*.

I may mention at once that I have been unable to find a trace of

* He actually describes 14 species, but he has numbered two species "9"; see above list.

any of Leach's species of ants in the Natural History Museum; and his descriptions are such that it is quite impossible to make out what the insects marked by v. Dalla Torre with a note of exclamation really are.

If v. Dalla Torre is correct as to Leach's no. 7, André's var. *niger* of *Messor barbarus* L., will sink, and will have to be known as *Messor barbarus* L., var. *huberianus* Leach.

The most unfortunate point in nomenclature which arises is that concerning the name *Formica picea*. For over 50 years the species we now know as *F. picea* Nylander, was confused with *F. gagates* Latr., until 1909, when Emery separated it from that species on the continent (*Deutsch. Ent. Zeitschr.*, 1909, 195), and in 1912 I put the matter right for the British species [*Ent. Rec.*, 24, 306 (1912); see also *Ent. Rec.*, 25, 67-8 (1913); and *Brit. Ants*, 325-34 (1915)].

There cannot, however, be two species called "*Formica picea*," and as Leach's name has 21 years' priority, Nylander's name must fall! This being the species described by Farren White in 1883 as *Formica glabra*, the latter name would have to be used; but unfortunately there is another *Formica glabra* Gmelin, *Linné Syst. Nat.*, ed. 13, i. 5, 2804 (1790), which is fatal to the adoption of Farren White's name. It is also probably not ascertainable what Gmelin's species really is, but at any rate it cannot be what we know as *F. picea* Nyl., since the scale is described as bidentate. The next name in order of date for this insect is *Formica transkaukasica* Nasonow, *Imp. Obsch. Lyrrb. Est-Ant-Etn. Mosc.*, 58, (1) 62 [= *Tr. Lab. Zool-Mus.*, 2, (1) 62] (1889), and this is what the insect we know as *Formica picea* Nyl., will have to be called.

I have given the names of Leach's species of *Culex*, but must leave this matter for our Dipterists to deal with.

The Diurni of East Tyrone.

By THOMAS GREER.

As an increasing interest is being taken in the local variation of Lepidoptera from Ireland, I have compiled the following notes on insects observed in this district.

Although the butterflies met with, only number some twenty species, the lack of quantity is to a certain extent compensated by the diverse variation exhibited.

Pieris brassicae.—Almost entirely single brooded, although during some warm autumns, a certain number or larvæ may feed up rapidly and produce a partial second brood, the greater number remaining as pupæ and not emerging till the following year. In some seasons very abundant, in others, very rare, or almost absent.

P. rapae.—Unlike its larger relative this species is always double brooded; many of the females of the summer brood are of a pale yellow colour.

P. napi.—This species is in this locality more abundant in damp meadows and marshes than in woodlands; these swampy localities are always more or less under several feet of water during the winter months, hundreds of pupæ of this, as well as other species being submerged, often for long periods.

In the spring brood many of the males are without the apical blotch and discal spot, while others have the blotch and spot well developed;