female, are narrowly brown on hind margin, showing the incisures.

It will be seen, by comparing descriptions, that the present specimens have (at least in the male) more golden pollen on abdomen than the San Rafael (Vera Cruz) specimen, thus indicating a tendency toward still another variety.

GYMNOSOMATIDAE.

(g) Gymnosoma fuliginosa Desv. One male, August 31; and three females, August 30 and Sept. 3; all on flowers of Solidago canadensis on acequia banks within the town of Las Cruces, taken by the writer in 1897. The number of specimens previously taken in New Mexico is seven.

OCYPTERIDAE.

(10) Ocyptera euchenor Walk. One male, August 31; and one female, Sept. 2; both on flowers of Solidago canadensis on acequia banks within the town of Las Cruces, taken by the writer in 1897. Length, 10 to 10.5 mm. These are additional to the specimen taken by Cockerell, August 5, 1897, on flowers of Bigelowia a Wrightii in the Mesilla Valley, and already recorded (Psyche, Dec., 1897, pp. 149–150).

Mr. D. W. Coquillett, in his "Revision of Tachinidae," calls this species O. carolinae Desv. I have no copy of Desvoidy's Myodaires at hand to verify this reference.

14. Ocyptera euchenor var. dosiades Walk. One female, August 25, on flowers of Clematis ligusticifolia, on acequia banks within the town of Las Cruces, taken by the writer in 1897. Length, 7 mm.

This is not the dosiades of Mr. D. W. Coquillett, in his "Revision of Tachinidae," as it has the two pairs of marginal macrochaetae, as well as the smaller apical pair. It is the form which I have heretofore always referred to dosiades Walk. When Mr. Coquillett adduces some evidence to show that Walker's types of dosiades possessed no apical pair of bristles, and but one marginal pair, I will revise the present determination.

DESCRIPTION OF AN UNUSUAL SAW-FLY LARVA BELONGING TO THE XYELINAE.

BY HARRISON G. DVAR, WASHINGTON, D. C.

As far as I can ascertain there is no description extant of any larva of the subfamily Xyelinae of the Tenthredinidae. Cameron says in his monograph that the larvae are without feet, and Dalla Torre in his catalogue gives a note stating that Xyela julii lives on Betula alba, but without reference to any description.

In the vicinity of New York there has
May 1898

PSYCHE.

been known to collectors for some time
a curious larva resembling the excre-
ment of birds. It is found on the young
tender leaves of the hickory and butternut
in May and disappears by the end
of that month, not to reappear till the
following season. The larva is solitary,
though when abundant, several may
occur on one leaf. It is nearly footless,
the short feet being only feebly func-
tional and the larva wriggles around
very like a Lyda when out of its web.
It rests by curling around a portion
of leaf or stem in a single spiral and
only spins a few inconspicuous threads
of silk. It lives freely exposed, pro-
tected, doubtless from birds by its resem-
blance to a noxious object. It is very
unusual for saw fly larvae to be highly
specialized enough to mimic particular
objects; but in this case the resemblance
is remarkably exact, as New York col-
lectors will testify.

Mr. W. H. Ashmead, in a paper en-
titled "a synopsis of North American
Xyelidae," read before the Washington
Entomological society in Dec., 1897,
described two new genera and gave a
generic table of this group. &re has
kindly furnished me with an advance
copy of this table which is given below.

*Plaurostenura avingrata* n. sp. ♀ Shining
blue-black, submetallic. Labrum emarginate,
with a terminal white line and pair of large
round white spots; palpi partly whitish.
Joint and extreme base of posterior femora
and last four joints of posterior tarsi white.
Abdomen and legs shining, head and thorax
dull. Nervures black, wings nearly hyaline,
a trace of smoky bordering the veins of fore
wings. Hind tibiae hairy and with six long
spurs. Length 13 mm.; expanse of wings
29 mm.

Larva. Last four stages observed.

Stage, width of head 0.8 mm. Head shin-
ing brown. Body shining brown dorsally,
milk white subventrually, setiferous tuber-
cles black, not very large, two transverse
rows per segment in dorsal aspect, three in
lateral view. The segments are 4-annulate,
a row of three or five tubercles on each side
of second (spiracular) and third annules, a
half row of three tubercles on the lateral
portion of the fourth annule; subventral
folds with scarcely distinguishable rudimen-
tary tubercles. Legs colorless; a narrow ob-
scure white dorsal line. Feet all unusually
small; thoracic ones black ringed; abdominal
ones on joints 6-12 and 13; above the anus
a pair of low conic setiferous warts. The
tubercles usually have two setae each.

The larva wriggles over the leaf when it
wishes to move, using the feet poorly.

Next stage. Head 1.5 mm. wide, shining
brown, eye and jaws black. The white color
formerly confined to the subventrual region is
now present also as dorsal patches between
joints 4-5, 5-6, 11-12, and top of joint 13 pos-
teriorly. Tubercles brown except the two
lower of the anterior row which are still
black. Otherwise as before.

Stage before last. Width of head 2.1 mm.
Much the same but the brown and white still
more mottled; a broken white dorsal line;
nearly all the dorsum of joint 5 white.

Last Stage. Head rounded, dark brown,
shining, shading paler in the sutures of mouth
parts; width 2.5 mm. Antennae brown, pale
ringed, palpi black. Thoracic feet black at
base; then pale with testaceous rings. Seg-
ment indistinctly 4-annulate, the tubercules
watery, concolorous and obscure, nearly ob-
solete and difficult to distinguish. Dorsum
shining olivaceous brown; a broken narrow
white dorsal line; a white patch on joints 3,
4, on 6 centrally to 11 centrally, patches on 12,
13 and anal plates, milk white from spiracles to feet, extending higher on joints 4-6 and 11-12, mottled. End of joint 13 swollen above, light brown; joint 3 a little enlarged dorsally. In the natural position of rest, curled spirally around a leaf petiole, the two largest white patches adjoin each other.

Enters the earth without ultimate stage. Single brooded, feeding only on immature leaves.

Staten Island, N. Y., June 1; Bellport, Long Island; Bedford Park, N. Y., May 25; Fort Lee and Plainfield, N. J., May 16 (the youngest one).

Table of genera of Xylidae.
(By W. H. Ashmead.)

1. Front wings with the intercostal vein uniting with the subcostal; hind wings with one complete submarginal and one discoidal cell. . . . . . . . . 3

2. Antennae 9-jointed, the six terminal joints very short, together not longer than the scape or less than one fourth the length of the third joint; clypeus triangularly produced in the middle; claws bifid; all tibiae very spirous, hind tibiae with 4 long spurs beneath between middle and apex

Megaxyela Ashm. (type X. major Cress.)

Antennae 12-jointed, the nine terminal joints much shortened, together much shorter than the third joint; both transverse radial nervures originating from the second cubital cell; clypeus and tibiae as in Megaxyela; claws with a large erect tooth before middle

Pleuroseurn Konow.

3. Antennae 12-jointed, the nine terminal joints slender, lengthened, together as long or longer than the third joint; claws long, slender, with a very minute, nearly obsolete tooth beneath a little beyond the middle 4

4. Front wings with both transverse radial nervures originating from the second cubital cell, rarely with the second transverse radial interstitial; clypeus with a median ridge which is slightly extended beyond the anterior margin, but scarcely triangularly produced . . . . Manoxyela Ashm. (Type M. californica Ashm.)

Front wings with the first transverse radial nervure originating from the second cubital cell, the second originating from the third cubital; clypeus triangularly produced anteriorly . . . . Xyela Dalman.

RUDOLF LEUCKART.

So many and such valuable contributions to our knowledge of the morphology and physiology of insects have come from the laboratories of the late Professor R. Leuckart of the University of Leipzig, that a few words of appreciation of this master zoologist's labors and of regret for his loss can not be amiss in the pages of PSYCHE. Dr. Leuckart, who died in February in his seventy-sixth year, was a zoologist of extraordinary range of study, touching in his work the anatomy and life-history of the most widely separated groups of animals, working indeed through the whole animal realm from Amoeba to Man. His largest contributions are those to the knowledge of the parasitic worms, but his enlightening studies of the micropyle and fertilization of insect eggs (1855), the reproduction and development of the Pupipara (1858), the alternation of generations, and parthenogenesis among