

NOTES ON ALARIA FLORIDA, Guén.

BY W. SAUNDERS, LONDON, ONT.

In July of last year there bloomed in my garden a fine plant of that variety of evening primrose known as "*Lamarckiana*" (*Oenothera Lamarckiana*). I had been advised by an Entomological friend to procure this flower with the view of attracting moths at night, and found it to succeed admirably. Its lovely yellow petals expand suddenly about seven o'clock every evening, and diffuse a fragrance all around very attractive to Sphingidae and other nocturnal moths. The flowers expand about three inches and are very beautiful; they remain expanded until some time after sunrise the following morning, when they close to open no more. The plant flowers abundantly, fresh ones appearing every evening.

I was surprised at the number of specimens of *Alaria Florida* which were attracted—a charming little moth with the greater part of its fore wings covered with brilliant rosy red. It had always been a rarity with me before, indeed for several years I think I had not met with it at all; but now, night after night I found them hovering around these flowers, and on several occasions found three or four specimens the morning following buried amidst the closing petals.

After a few days I saw no more, but soon observed a smooth green caterpillar feeding on my favorite plant. Not content with eating the leaves only, these marauders had a special preference for the flower buds, eating away into their tender substance and utterly destroying them. It did not occur to me at the time that this might be the larva of *A. Florida*, but so it afterward proved. After killing most of them, several were reserved and fed for some time on the leaves of the plant, after which they changed to pale brown chrysalids. The following is a description of the full grown larva:—

Described July 25th—Length 1.10 inches; cylindrical.

Head rather small, slightly bilobed, pale yellowish green; mandibles tipped with dark brown.

Body above pale green semi-transparent; a dorsal line of a darker green, due to the transparency of skin showing the internal organs; a lateral line of the same shade of color, but fainter; *second segment with a patch of pale dull red on each side*; entire upper surface downy, with very short pale brown and whitish hairs scarcely visible without a magnifier; spiracles pale brown.

Under surface similar to upper, a little darker shade of green prevailing on anterior segments; feet and prolegs green, the latter faintly tipped with brown.

These remained in the chrysalis state during the fall, winter and spring, producing the perfect insect early in July, 1869.

NOTE BY ED.—In July, 1866, and again in the same month of 1868, I had the pleasure of spending a short time at Weston, with the Rev. W. A. Johnson. On both occasions we took a number of specimens of *A. Florida* on the flowers of a variety of Evening Primrose; some were taken at various hours of the night, and others in the morning, entangled in the closing petals; we also found a number of larvæ, similar to those described above, eating into the flower buds, and ruining the beauty of many of the blossoms. I was anxious to trace the history of these caterpillars, fancying they must have some connection with the pretty *Alarias*, but having no *Oenothera* plants at home, I thought it was useless trying to rear the larvæ; I am very glad to find that Mr. Saunders has solved the question for us. During my last visit Mr. Johnson gave me an enormously magnified drawing from the microscope of an egg of this insect, which was laid at 4.30 a. m., on the 15th of July, 1868. In shape it resembles an orange, being circularly flattened at the top, and supported at the base on a short stem-like attachment to the flower bud; the sides are slightly crenate longitudinally, and ornamented with minute circular prominences. I have also taken the moth on the flowers of the wild species of *Oenothera* in this neighborhood, but always in the evening, and during the month of July; this year I have examined numbers of these plants, but have not found a single specimen of the moth or its larva; last year they were tolerably common.

LIST OF COLEOPTERA,

TAKEN AT GRIMSBY, ONTARIO, BY J. PETTIT.

(Continued from Page 107.)

CARABIDÆ.

PLATYNUS, <i>Bon.</i>	PLATYNUS (<i>continued</i>).	PLATYNUS (<i>continued</i>).
Hypolithos, <i>Say.</i>	Harrisii, <i>Lec.</i>	Placidus, <i>Say.</i>
Marginatus, <i>Chaud.</i>	Cupripennis, <i>Say.</i>	Obsoletus, <i>Say.</i>
Sinuatus, <i>Dej.</i>	Punctiformis, <i>Say.</i>	Stigmatosus, <i>Lec.</i>
Extensicollis, <i>Say.</i>	*Subcordatus, <i>Lec.</i>	OLISTHOPUS, <i>Dej.</i>
Decorus, <i>Say.</i>	*Vagans, <i>Lec.</i>	*Parmatus, <i>Say.</i>
*Moerens, <i>Dej.</i>	Retractus, <i>Lec.</i>	*Micans, <i>Lec.</i>
Melanarius, <i>Dej.</i>	Ruficornis, <i>Lec.</i>	PTEROSTICHUS, <i>Bon.</i>
*Metallescens, <i>Lec.</i>	Octopunctatus, <i>Fab.</i>	*Sustentus, <i>Lec.</i>
	(To be Continued.)	

* Species marked with an asterisk have not been before included in the list of Canadian Coleoptera.