

THE MILKWEED AND INSECTS.

In connection with Mr. Sladen's note in the December number of THE NATURALIST telling of the bee with the pollinia of *Asclepia* attached to its feet, and describing the remarkable method of cross fertilization adopted by this plant, it may be of interest to remark that *Asclepia*'s device to ensure the effective dissemination of its pollen causes—in the case of our native *A. syriaca* at least—the death of large numbers of insects. The pollinia are so difficult, comparatively, to withdraw, that they can be removed from their cells only by strong insects like the larger species of bees. Less sturdy seekers after nectar which get their feet caught in the clips, as recounted by Mr. Sladen, are not able to pull out the pollen masses. Their struggles seem only to wedge their legs more firmly in the narrow fissures of the corolla, and unable to free themselves, these hapless guests at the Caesar Borgia feast spread by the plant, die a lingering death.

Many different kinds of insects, such as flies, beetles, gnats, wasps, bees, and small butterflies and moths, come thus to an untimely end, but in my experience, by far the most frequent victims are ants. An examination of the blossoms of *A. syriaca* growing in the vicinity of ant colonies never fails to discover some of these exemplars of Solomon caught fast in the manner described, some still vainly struggling for freedom, others hanging dead like gibbeted malefactors.

This destruction of insect life is apparently merely accidental, and seems to be of no particular use to the plant. For, of course, *Asclepia* is entirely devoid of any such digestive apparatus as is found in the sundews and pitcher plants, and cannot utilize the dead insects in any way as food. Doubtless, cross fertilization is much better accomplished by the stronger flying insects, which are capable of carrying the pollinia farther and safer than the weaker flyers or the crawlers, but death seems a rather severe discipline of the latter for their undesired visit.

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BOOK NOTICES.

HARDY ROSES: THEIR CULTURE IN CANADA, by W. T. Macoun, Dominion Horticulturist; Pamphlet, No. 9, Dominion Experimental Farms.

Lovers of flowers will welcome the appearance of this pamphlet of 12 pages, which may be obtained free of charge