can be seen through the black scales and is otherwise normal. The coloration of the body and of the appendages has remained unaffected.

There is a melanic *P. tharos* female labelled "Norwich, Mass./30 July 1955/leg. M. Cady" in the Peabody Museum at Yale, but in this specimen the wing markings have become completely blurred and smudged. On the dorsal side there is extensive fulvous at the wing bases with the rest of the wing surface black. Ventrally only two of the forewing black markings appear on a clear yellow ground, and the hind wing is cream with a large central brown patch. The two melanic specimens are very different in the way that the wing patterns have been affected, and they may be the result of quite different effects (for example, environmental *vs.* genetic).

The Florida individual was the last to emerge in a brood of 158 individuals (87 ♂ ♂, 61 ♀ ♀), pupating and emerging several days after the last of its siblings. The melanism is thus correlated with a significant slowing in the rate of development, due probably either to a direct effect on the developmental rate or to a general lessening of vigor.

It is interesting to speculate on the possible inheritance of the form. The melanic was mated to a non-melanic sibling and produced a brood of about 40 adults, all of non-melanic appearance. Embryo mortality was high but normal for an F_1 of a sibling mating in this species; larval and pupal mortality were negligible. If the melanic form is genetic in origin, it is probably recessive.

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A SPECIALIZED CASE OF COMMUNAL ROOSTING IN *PIERIS RAPAE* (PIERIDAE)

As a possible parallel to the report by Clench (1970, J. Lepid. Soc. 24: 117–120) it seems worthwhile to record my observations on a roosting aggregation of *Pieris rapae* (L.) in a garden at 2 Gulfview Rd., Blackwood, South Australia, in the foothills of the Mt. Lofty Range south of Adelaide, at an elevation of 800 feet. I lived at this address for five and one half years (1965–1970), during which time the following was observed.

P. rapae is abundant and multiple-brooded in this locality; the larvae feed upon a luxuriant patch of nasturtium (*Tropaeolum*) in the garden being described. Adults are on the wing from early spring (Sept.) to autumn (Apr.-May), reaching a peak during the summer period (late Nov. to early March). In this garden grows a small tree (height approximately 10 feet; shape roughly pyramidal; foliage cover fairly open) of *Pittosporum undulatum* Vent. var. *variegatum* (PITTOSPORACEAE). The important feature of this tree, with respect to the account that follows, is the coloration of its leaves. The leaves of this smaller-growing garden variety of *P. undulatum* are a pale greenish-white with contrasting white margins. The overall effect of the tree color is whitish-green; seen in the warm yellowish rays of late afternoon sunshine, just prior to sunset, these leaves light up with a faintly yellowish or cream-green tinge which is very close to the shade on the visible areas of the undersides of *P. rapae* wings when the butterflies are in their normal resting position with the wings closed over the dorsum. This *P. undulatum* tree was growing among other nearby trees, shrubs, and vines, but was in an opening where it received direct sun for most of the day. During sunny summer days, adults of *P. rapae* flew through this garden by the dozens, often five or more being visible at one time within the boundaries of the garden. Many of them would fly over and around this tree during the midday hours, even then showing somewhat more attraction to it than

to most other vegetation in the garden. Their primary attention, however, was centered around the extensive nearby *Tropaeolum* patch during this part of the day.

As late afternoon approached, on most sunny days, *many* individuals would be seen circling, alighting upon, or flying in and out of the small *Pittosporum* tree. Their concentration around this particular tree would become quite noticeable, although a few would also be seen flying around other plants in the same garden, preparatory to settling for the night. As the sun came closer to the horizon, more and more individuals settled in this tree. At first there would be much alighting and taking off again, and fluttering slowly about, before final settling took place.

Once at rest among these whitish-green leaves, the butterflies were very hard to see at a passing glance, although careful scrutiny would show up some of them. Numbers settling into this tree would often approach 10 or more individuals by sunset, whereas other nearby vegetation would only attract the odd individual. A person passing the *Pittosporum* tree in late afternoon, at the right time, would often cause a small "cloud" of *P. rapae* to burst from the tree as he passed by; later (early evening) they would not arise from the tree unless it was knocked, or a very sudden movement was made at close range. During the period of "settling in" I noticed that most of them landed on the western (sunny) side of the tree, and among its upper branches, wherever the last weak rays of sunshine remained longest.

This case of "communal" roosting is probably more or less explained in the last paragraph of Clench's discussion. It seems likely that the distinctive foliage coloration of this particular variety of *P. undulatum*, plus its favorable location with respect to the late rays of sunlight, combined to provide a special attraction for *P. rapae* under the influence of late afternoon sunlight. In most *other* circumstances, I strongly suspect that this pierid would show little or no communal roosting behavior. At best they might show only a slight attraction for one type of roosting situation over some others, but they would probably not form any noticeable aggregations on any single plant.

No marking of individuals was undertaken during these summers, so I cannot say whether the same individuals came to roost in this same tree night after night, or if there was any tendency to use certain leaves or stems repeatedly in preference to others on the same tree. I would guess, however, that a fairly large percentage of different or new individuals formed the aggregation in this tree each evening. Probably the turn-over was very high each day, as the butterflies wandered through this residential area, from garden to garden. Those finding themselves (by late afternoon) in the garden described, would naturally gravitate toward the most attractive roosting place which, in this instance, happened to be the small creamy-green *Pittosporum* tree.

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NOTES ON THE CONFUSION BETWEEN *LETHE CREOLA* AND *LETHE PORTLANDIA* (SATYRIDAE)

There has been confusion between *Lethe creola* (Skinner) and *Lethe portlandia portlandia* (Fab.) in not only private collections but also in institutions and in literature.

This confusion is evidenced by the fact that the female of the type series of *creola* from the Skinner collection, which is now in the Carnegie Museum, was found to be a female of *L. portlandia* by Gillham and Ehrlich. Without going further into