

Australian Museum more than a month later, as fresh as though it had just been captured.

During a recent visit to the United States difficulty was encountered in finding suitable supplies of Chlorocresol. In Australia several chemical companies stock it. The most suitable grade is in the form of a white granular substance like sugar. This is sold, for example, by D. H. A. Laboratories, Pty. Ltd., Sydney, N. S. W., Australia, and costs approximately \$7 per pound. This quantity should be sufficient to keep the average collector supplied for several years. Much of the chemical agent can be reclaimed from old containers, as there is little loss by evaporation.

The present writer's speciality is the study of the primitive moths of the family Hepialidæ. Freshly killed insects of this family can be sent to him from many places packed in this manner and arrive in perfect condition whereas previously their heavy bodies and brittle wing tissues made it difficult to ship dried and spread specimens without risk of injury.

South Australian Museum, Adelaide, AUSTRALIA

SPRING COLLECTING IN MEXICO: THE GOMEZ FARIAS REGION OF SOUTHWESTERN TAMAULIPAS

by THOMAS C. EMMEL

The lepidopterist traveling to Mexico generally chooses to plan his trip during the summer months of July to September in order to collect at the peak of the flight season, for after the summer rains have begun, even the most unobservant *tourista* cannot help but notice the great — often incredible — numbers of butterflies along the highways.

In the spring of 1959, the author was able to experience a different kind of collecting — traveling on a 5,000 mile expedition with L. IRBY DAVIS, Research Associate of the Cornell Laboratory of Ornithology, into remote areas along the eastern coast of Mexico and the Yucatan Peninsula in the height of the dry season.

One of the most interesting collecting areas — and one that is readily accessible in a one-day journey from Texas — was in southwestern Tamaulipas, around the village of Gomez Farias. The dirt road to the

village is found about 106 kilometers (64 miles) south of Ciudad Victoria on Highway 85 but we continued on the main highway to El Limon where we bought gas and supplies and then retraced our route 19.6 km. and turned west at the marked dirt road.

The rich farmlands around El Limon and Mante extended along the highway and for two kilometers on the Gomez Farias road. Principal crops were sugar cane, oranges, bananas, and papayas. At this season, the dry forest beyond the cultivated areas was leafless and indeed seemed lifeless; acacias, mesquite (*Prosopis*), and other thorny trees formed much of this lowland (elevation 200 to 300 feet) forest. Doubtless in the summer this forest abounds with Lepidoptera, but not in March.

At 9 kilometers we began to climb through the foothills of the Sierra Madre Oriental and the verdant forest became more dense and tropical; wild pineapples (*Bromelia pinguin*) grew under the trees in extensive patches. At 10.3 kilometers, collecting proved outstanding. Four species of Papilionids were collected in practically as many minutes: *P. pilumnus* Bdv., *Battus polydamus* L., a red-spotted species, and a demure, blue-spotted tailless papilio.

Pierids of every size and description fluttered by the collector in a bewildering array. *Eurema* species, including *gundlachia* Poey (*proterpia* spring form), *boisduvaliana* Feld., *nicippe* Feld., *mexicana* Bdv., *salome* Feld., and *daira* Latreille, mingled with *Colias cesonia* Stoll, *C. eurytheme* Bdv., and *Nathalis iole* Bdv. Pure white *Ascia* with the ever common *Pieris protodice* L. often managed to distract one's attention from the rare yellow females of *Pieris viardi* L. and its more common white males.

Giant *Anteos clorinde* Godart and *A. mæruia* Fabricius floated high overhead; several *Adelpha* (nymphalid) species darted out at frequent intervals as if to challenge the collector's intrusion. A single fresh *Smyrna karwinskii* Geyer was taken (March 5) in this area; three or four heliconiid species swarmed about the blooming vines, along with *Dione butleri* Stich. and many *Phyciodes*. The prize species seen (but not collected) was *Speyeria nokomis cærulescens* Holl. (?) — a perfect pair.

From here we moved on up the road four kilometers to the small town of Gomez Farias and the vegetation became more and more tropical; bananas and coffee trees grew out to the edge of the road. We found Gomez Farias a beautiful (and attractively clean) native Mexican village with huts of branches and thatched roofs. The people waved merrily as we passed by, and, as we found most everywhere in Mexico, courtesy extended to the Mexican citizen is returned in the friendliest manner.

Beyond the village the "road" became little more than a wide trail, passable only with a four-wheel drive in the lowest gears. The elevation increased sharply and we passed through lush tropical forest, where

tangled lianas and Strangling Figs (*Ficus cotinifolia*) cascaded down in a confused maze from the towering tree-tops. Although we noticed only one worn *Morpho peleides* Koll., SUTTON (1942) mentions that his ornithological party "frequently" observed them (March to May) in the lowland forests. Heliconiids, *Metamorpha stelenes* L., *Marpesia chiron* Fabr., and *Dryas* species swarmed along the roadside; the purple sheen of *Eunica monima* Cramer and *Myscelia ethusa* Bdv. flashed in the sunlit clearings, while back in the shadowy thickets delicate *Mestra* and satyrs floated cautiously. Occasionally a *Hamadryas* butterfly would dart with a sharp clicking noise from its camouflaged position on white bark. The brilliant yellows and oranges of *Phæbis* species (*P. sennæ* L. and *agarithe* Bdv. being the most common) created artificial patches of sunlight in the dark greenery. Several *Dismorphia cornelia* Feld. seemed to stumble awkwardly through the humid air in comparison with the rapid, smooth flight of the dark *Papilio* just beneath the forest canopy.

Soon, though, the road climbed to 3,200 feet and we entered part of the most northern cloud forest in Mexico. Tall, slender Sweet-gum trees were just coming into leaf during our visit; epiphytic bromeliads and small orchids were visible on the larger branches. We worked this area for several days, but fewer butterflies were flying than at the lower elevations. Common genera were: *Thecla*, *Phyciodes*, *Adelpha*, *Emesia* and other metalmarks, and *Pieris*. Several nice specimens of the oriental-looking *Catasticta nimbice* were taken, along with various satyrid species, *Celastrina argiolus*, and *Chlosyne janais* and *lacinia*.

We were fortunate in having generally good weather — morning clouds in the cloud forest areas but mostly sunny with the daytime temperatures ranging between 80° and 85°F. in the foothill region. At the higher elevations (3,600 feet) the night temperatures would drop to around 40°.

Although only five days were spent in this area of Tamaulipas, both ornithological and lepidopterical objectives were achieved. We recorded the voices of several resident birds and collected the imagos of many butterfly species, as well as keeping data on all species seen. We found that good collecting in northern Mexico is possible in the driest part of the year, and the closeness of the Gomez Farias region to the United States border would seem to make a trip in this "off" season both feasible and worthwhile to collectors who wish a taste of the tropics.

Reference

- Sutton, G. M., & O. S. Pettingill, Jr., 1942. Birds of the Gomez Farias region, southwestern Tamaulipas. *Auk* 59: 1-34.