## ESPECIALLY FOR FIELD COLLECTORS

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## BAITING PHILIPPINE BUTTERFLIES

by Julian N. Jumalon

In the Phillippines many interesting forms of butterflies can be taken with baits. Several natural baits present in the insect's habitat have been observed to be favored by certain species of butterflies, while baits artificially prepared and planted in places where these insects frequent, have also been found to entice them successfully, more especially those belonging to the family Nymphalidæ. The writer found an opportunity to work on the baiting method of collecting insects during several of the annual summer collecting and exploring expeditions carried out by the University of San Carlos of Cebu City. In these annual visits to various types of localities, he was able to take notes of the interesting results, and at the same time discover various kinds of jungle sauce piquants to which some butterflies make regular calls.

Earlier observations made in the island of Levte disclosed the habit of a tawny Charaxes of locating heaps of civet-cat ordure. In many occasions, the same butterfly has been seen sitting comfortably before a heap of human excreta. Butterflies of this genus have a strong attachment to offensive-smelling things. Charaxes fabrius, an easier species to encounter in this city, where its favorite foodplant, the Camanchile tree (Pithecolobium dulce), abounds, is popuarly known as the "palahubog" (drunkard), because it has a penchant for tuba, the coconut wine. It is frequently seen near tuba stores, often unsteady in flight after one drink too many. Not infrequently it dashes against walls of houses, like a person who acts queerly after a drinking spree. It has even been seen several times chasing delivery trucks rushing tuba into the city for distribution to stores. Places where the tuba gatherers empty their bamboo tubes of ground mangrove bark, which is used for coloring the coconut sap, are fine spots at which to expect these butterflies. About three kinds of Charaxes, several species of saturs and dusky nymphalids, two kinds of Melanitis, and the huge Amathusia phidippus of the twilight world, are among the regular patrons easily encountered atop coconut trees which are marked for the coconut wine production. Usually, coconut trees groomed for the tuba industry are towering domains of the acrobatic tuba sap harvesters, and are beyond the reach of the collector's net.

Out in Mindanao and Leyte islands, a tree called "haguimit" (Ficus minahassæ) sends down bushy clusters bearing thousands of succulent fruits which attract hundreds of insects when ripe. The overripe fruits form a thick layer on the ground and ferment, and this heap attracts the same or

other types of visitors which prefer it stronger. On sunny days, dazzling Ptychandra schadenbergi, orange-striped Euthalia, Clerome kleis, several Melanitis, wood satyrs, occasional jungle danaids, and the mountain Zethera thermæa, can be seen elbowing each other on the broom-like spray, unmindful of the hundreds of droning bees and wasps and flies. A whole day may be profitably spent near the tree, where a fastidious collector can select his prizes from the ever-changing faces of winged visitors.

A shrub-tree thriving on the edges of forests and wooded hills, known locally as "anagasi," is the favorite parking place of a beautiful, rare Neorina. Parts of its trunk or branches which are grazed by carabaos or blazed by the farmer's bolo, secrete a sap which catches the nose of this shy nymph. Unlike other nymphalids, this blue-violet beauty alights upside down upon its vertical dining table. In their first encounter with this shade lover in Leyte in 1955, it took the writer and his son a whole week to collect the three specimens which were partial to a single tree. It was at home in the semi-twilight dimness of early morning and late afternoon of cloudy days. Yet, in Agusan last summer, several fine specimens were taken at an altitude of about two thousand feet on bright afternoons. In Mindoro, in 1956, at nearly four thousand feet elevation, a couple were encountered browsing contentedly in the foggy fringes of pigmy negrito trails. A friend collecting in southern Luzon reported encountering this butterfly upon the same tree, which is known there by the same name, hence its common name, the Anagasi butterfly. This woodland beauty has the habit of returning to its favorite glade again and again, oftentimes choosing the same perch with unerring accuracy.

A trick employed in Leyte in the early thirties, which the writer learned from two mountain boys, was the simple process of debarking a part of the hanagdong tree. He remembered that, with cat-like agility, the boys would climb the tree and cut a ring around the trunk about six inches in width and about three meters above the ground. Left for two or more days, the scorching April sun would work wonder with the sap. When revisited, the bait yielded scores of brilliant butterflies and huge black stag beetles. In the passage of years, the writer had forgotten the likeness of that tree, and had had no chance to repeat the trick. And the two boys have grown into young men and were killed by guerillas during the resistance, for faults for which, ordinarily, mothers would feel reluctant to whip their own erring children.

Scents were employed with certain results in the mountains of Zamboanga in 1954. Cheap perfumes were tried in a small gulley where handsome wood nymphalids were observed shying at our approach while they feasted on the fruits of the haguimit. A few drops of perfume placed upon a wad of cotton and hidden in a bell-shaped flower immediately created a stir. In a matter of seconds, a couple of Mindanao Tanæcia came and excitedly hovered around to locate the disturbing odor. In this case, Dana perfume was used. Spirit of anise, vanilla, and thinner were used in another portion of the woods with discouraging results, although once, in the city, a nymph was attracted to the strong fume from a newly opened can of thinner. A more interesting incident occured along a stream in Leyte when several butterflies and a

skipper were attracted to the spilled liquid from a can of sardine and also of salmon. Once, in the same place, the writer's wet denim trousers was doggedly hounded by a tawny skipper, and even the pretty *Symbrenthis lucina* and a swallowtail were observed to appreciate something out of the wet hiking gear.

In Bohol Island, Rev. Fr. H. Schoenig of the University of San Carlos and the writer tried the conventional bait suggested in books. Stale beer, wine, molasses, sugar and mashed ripe fruits, were tried in various combinations at the foot of a well-wooded hill where previous visits disclosed an abundance of a variety of butterflies. Except for a battered Zethera thermæa, a Symphædra panopus, and a couple of grass satyrs, nothing eventful came. Sunshine was then intermittent as the day was generally cloudy. The party, however, did not pay much attention to their baits, as they had a greater thrill that day ambushing the huge males of the Ornithoptera magellanus which were remarkably wonderful as they repeatedly made sorties over the red lantana flowers beside a rice field close to the hills. Or, perhaps, it was the wrong bananas. Mashed cooked sweet potatos (camote) with sugar and molasses also failed.

Lately, with the University of San Carlos expedition to northern Mindanao (Operation Papilio idaoides), the same team resorted to baits in their last two days in the mountain of Agusan. With an over-supply of ripe bungulan bananas, a kind which remains green when ripe, it occurred to the party to try baiting forest butterflies despite their great success with nets. Response was immediate and rich, especially from the mountain's beautiful Brush-footed butterflies. At an elevation of over two thousand feet on a Mamanua (negrito) trail, tree trunks and outcropping roots were painted with the banana mash. Taken were an interesting, finely striped Elymnias, elegant blue Adolias, Euthalia panopus, Clerome, a jungle Charaxes, the wary Tanæcia leucotænia, and small brown satyrs. The climax however came when, on our last day, a huge, very rare Zeuxidia (ottomana?) was seen sitting on the bait placed on aroot along a side trail. Patient stalking enabled the writer to take the crepuscular beauty which first flew away and later returned and alighted on a tree trunk nearby. It was evident that several more kinds of retiring mountain nymphs could be taken with bungolan banana bait. For even the more elusive and beautiful violet Zeuxidia was seen near the area baited.

Observed to attract Lycænids are the tips of a leguminous vine common in mountain clearings known as coot. Fresh cane-trash strewn along forest trails invited the velvety blue Adolias, Euthalia panopus, Clerome kleis, and two species of Tanæcia. A very rare green-banded Euthalia identified only with tree-tops in the forest was taken upon the chopped tip of freshly cut rattan vine. Bark of logs scattered on the banks of a stream in the mountains of eastern Mindoro is favored by a rarely seen forest nymphalid. These formed colonies of sixes or more on the juicy bark and could be taken quite easily while absorbed in their feast. Bleeding parts of the Jackfruit tree and

its fruits attract the *Doleschalia polibete* and *Charaxes fabrius*. But something different was seen to attract the mountain *Terias hecabe* of Leyte. On a round, slightly mossy stone about six inches in diameter beside a stream at about eight hundred feet elevation, nearly one hundred oriole-yellow butterflies sat, giving it an appearance of a stone upon which a painter poured a can of chrome yellow paint. Many similar stones scattered around were not patronized.

In the summer of 1956, with the Ethnological study team from the University of San Carlos in northern Mindoro, the writer had his most thrilling experience in "picking" butterflies. Rev. Fr. H. Schoenig, head of that expedition, discovered a sulphur spring just one kilometer away from the expedition's headquarters at Bagtu, a logging town some fifteen miles east of the capital. Here, a few square meters of sandflat beside a swift stream revealed a sight which will thrill even a less excitable collector. Squatting singly and in groups at various points, were trim Papilio sarpedon, P. jason, P. antiphates, Hebomoia glaucippe, Appias domitia, A. albina, Leptocircus meges with long quivering tails, and several other mountain butterflies. Wisps of smoke and steam curling in the early morning air caused traveling butterflies to swerve from their course and settle down on the moist, strange-smelling sand.

Between early morning and noon, butterflies kept coming to the spring. The kite papilios composed most of the visitors to the place. The writer, simply by sitting on a stone beside the most liked spot, took in one sitting around seventy perfect specimens. A dead Papilio sarpedon, placed on the spot with spread wings, would collect as many as a dozen individuals beside it. Allowed to stay for a while, the insects could be taken or picked with bare fingers or forceps. The party took around five hundred P. sarpedon alone. It was strange that several Hypolimnas philippinensis which kept passing a few feet over the spring were noted to pay no attention to the smell which excited other butterflies. Other species collected at the spring were a skipper, the rare Papilio stratocles, a Snout Butterfly, a huge Neorina, the casual Papilio medon, and Symbrenthia lucina. A party of Manila collectors was able to locate the spring six months later, but was disappointed because a flood in the early part of the rainy season washed the area, submerging it under a foot of water.

While many butterflies, in answer to their natural needs, can thus be lured with baits to enable the collector to make them his prey, there are however some which could be coaxed to come within the net's reach simply by one's playing upon their nature. Some butterflies here for instance, could be lured to a live decoy. Others respond with the same greediness to artificial butterflies. Call it jealousy, aggressiveness, or plain curiosity, but certain butterflies will readily dart toward such baits if placed conspicuously on their way. In fact most local butterflies which are active in the air possess that habit.

In the thirties, the writer took over one thousand males of *Catopsilia* crocale, using several live baits of both sexes, tied to a twig and jerked occasionally, in the small acacia grove where hundreds of males were gamboling

and chasing egg-laying females. And in Zamboanga, four years ago, in a desperate last effort to bag a *Hestia* to enable the writer to represent the place in his series of these huge "ghosts", a piece of bristol board was torn into a crude shape of a butterfly. Tied to a long stick and dangled overhead, it finally attracted the jungle aristocrat. In this manner four were ultimately taken.

A new butterfly enthusiast, Albert Liao, has recently developed a great fondness for the elusive and fleet *Papilio dædalus*. While one has to outrun Jesse Owens, the sprinter, to enable him to get his first *P. dædalus*, this neophyte gets his weekly quota by the dozen merely by sitting calmly under the shade of the lantana bush and netting passing speedsters as they tarry over the decoy (a dead or fresh specimen) pinned to the red cluster of strong-smelling flowers. Another collector harvests scores of Orange-tip butterflies from the same area, using the same method.

It is a thrilling experience to observe a butterfly sailing in the sunshine and suddenly dart toward an alleged intruder upon its "domain." But for this peculiar habit of some butterflies, it would have deprived the writer and the most patient stalker, Mr. Samuel Ochotorena of the U. S. C., of the rare privilege of bagging several Papilio medon out in the unfriendly, rugged hills of northern Mindoro where these trim, high-soaring swallowtails are in their elements. It was incredible, but the white nets set to constant wigwagging motion made these elegant teasers plummet earthward to investigate the apparently officious interlopers. No better guerdon could have replaced these space gambolers, which, together with several male Papilio semperi which prompted the pair of collectors to ascend the hills as their last assignment, served as a fitting climax to their most fascinating adventure in the strange land of the fast-vanishing tamarau.

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