- I. Subgenus EUFLAGELLARIA.—Perianthii laciniæ interiores exterioribus majores, submembranaceæ. Bacca 1-locularis, 1-sperma.— Herbæ sarmentosæ v. scandentes; foliis striatis, apice in cirrhos desinentibus, vaginis plerumque integris.
- II. Subgenus CHORTODES.—Perianthii laciniæ interiores exterioribus æquilongæ. Bacca 3-locularis, 3-sperma.—Herba erecta; foliis plicatis; vaginis ad basin fissis.
- 1. Flagellaria (Chortodes) *plicata*, Hook.; erecta, foliis late elougato-lanceolatis longe acuminatis creberrime plicatis et longitudinaliter nervosis nervis primariis minute scaberulis venulis transversis convexis, vagina fissa marginibus membranaceis superne in auriculas obtusas utrinque dilatata, paniculæ ramis puberulis, perianthii laciniis ovato-subulatis.
- HAB. Isle of Pines, near the south extreme of New Caledonia; forming clumps by streams in the forest. M'Gillioray and Milne, October, 1853 (young fruit).
- Herba elata, 5-pedalis, robusta. Caulis erectus, indivisus? Folia pedalia et ultra, 3-5 unc. lata, utrinque viridia, sicca coriaceo-chartacea, creberrime plicata, plicis 20-30, nervis primariis utrinque scaberulis, vagina spithamæa et ultra, subtilissime asperula, striata, ad basin fissa, marginibus late membranaceis, in auriculas obtusas stipulæformes utrinque producta, *ligula* brevissima membranacea. Panicula pedalis, ampla, ramosissima, ramis et ramulis gracilibus sæpe flexuosis angulatis puberolis. Flores parvi (1-2 lin. lati), sessiles, bracteola minuta suffulti; bracteola ramulo paniculæ adnata, dentiformi. Perianthium viride, basi late campanulatum. Filamenta filiformia, perianthio duplo longiora. Antheræ filamentis æquilongæ, lineari-oblongæ, dorso supra basin filamento insertæ. Ovarium globosum; stigmatibus 3 filiformibus coronatum. Bacca immatura, 10 unc. lata, 3-loba.

PLATE VIII. Fig. 1, flower advanced, with the stamens still attached; 2, immature berry; 3, tranverse section of berry; 4, immature seed :---all magnified.

# Extracts of a Letter from Mr. WALLACE, dated "Singapore, October 10th, 1854."

On getting rid of my fever I went to a place in the interior called

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"Ayer Panas" (hot spring), about fifteen miles from Malacca. Here there is a Government bungalow, which the late Resident, Captain Ferrier, had kindly offered me the use of. I was accompanied by a young gentleman of Malacca who wished for change of air and exercise, and whose acquaintance with the Malays and their language was of much use to me. We took provisions with us for a month, as nothing was to be had on the spot, and the only communication with Malacca was by special messenger.

The bungalow was pleasantly situated on a gentle elevation by one of the narrow, flat, winding paddy-field valleys, which are such a characteristic feature of the Malacca district. Along the borders of this valley were numbers of scattered Malay houses, all elevated five or six feet on posts, a mode of building which seems general in this part of the world, from the Peninsula to New Guinea. Two or three Malay police resided in the house, of which they had charge, and a Hindoo convict living in a little hut adjoining did the sweeping and cleaning. Numbers of fruit-trees grew near the house, the Durian and the Jack being the most abundant, with the ever-present Areca palm, and a noble gigantic species, the *Borassus Gomuti*, from the juice of which a coarse sugar called "jaggery" is made and sold in small cakes by the Malays. Sometimes grated cocoa-nut is boiled with it, and it then forms an agreeable sweetmeat, which, in the absence of any other delicacies, we used for our dessert.

We remained here nearly a month, exploring the jungle in every direction, and making extensive collections of birds, insects, etc. Here I first saw the huge bats commonly called "flying foxes," whose wings often expand five feet. They came in the evening to the fruit-trees near the house, looking more like aerial machines than any living creatures. It was truly an extraordinary sight to behold these great-winged animals for the first time, so totally different are they from anything we can behold in Europe. They are much esteemed for food by all the inhabitants of Malacca, and we soon had an opportunity of tasting one, but it was too tough for me to pronounce an unprejudiced opinion on its merits as an article of food. Several fine species of squirrels were abundant, and these were much better eating.

The Malays seemed to live a quiet, lazy life. A little patch of paddy field, cultivated almost entirely by the women and children, supplies them with food for the year by a few weeks of labour; and this, with VOL. VII. 2 D

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fruits and betel-nut, is all they want. They are of short stature, well made, but certainly not good-looking; and, taking the women and girls I have occasionally seen as a fair sample, there is very little necessity for their hiding themselves or covering their faces, unless indeed they are ashamed of them. Every Malay man or boy carries a creese, or knife of some kind, in a large wooden sheath by his side; this and the sarong they never go without. The "sarong" is a curious garment; it is a ring or cylinder of calico, about a yard deep and a yard and a half in diameter; it is worn in all sorts of ways; either over one shoulder as a scarf, or wrapped round the body like a Scotch plaid, or more generally put round the waist like a petticoat, and twisted or tucked in in a great bunch in front, having a curious and uncomfortable appearance, though, from its being generally of bright colours, it is not unpicturesque.

The people generally appear to be very good Mohamedans. They abstain rigidly from wine and pork; they pray pretty regularly, attend the mosques on Fridays, and have two or three wives when they can afford it. Many make the pilgrimage to Mecca; and they have schoolmasters in most villages, who teach the children to read the Koran and to write. Here was a degree of social organization which the successive European conquerors of the country had had nothing to do with; and one cannot help admiring the wonderful genius of that man whose doctrines and mode of worship should have spread so wide and taken such deep root, and who, however great the errors of his system, has at all events banished idolatry, and raised many barbarous nations one step in the scale of civilization.

We had now made up our minds to go to Mount Ophir, which lay about thirty miles further in the interior, and to reach the summit of which is a great object with all adventurous tourists who visit Malacca. We had heard most alarming accounts of the difficulties and fatigues we should have to undergo, and of the danger of being bled to death by the little leeches which infest the jungles. Of these, however, we had already had some experience, and had got used to them. They are about an inch in length, and slender, with suckers at both ends of the body, and move, not by crawling, like our common leeches, but by successive steps, exactly like the *geometric*, or measuring caterpillars. They do not inhabit the water, but frequent damp jungle, on the leaves of plants, where they may often be seen standing erect or outstretched on their posterior extremity, and moving about their head right and left

in search of something to attach themselves to. Their bite is so gentle that it is never felt, and when satisfied they drop off; so that the only intimation you have of their attacks is when, on changing your clothes, you find your stockings or trousers saturated with blood. This used to happen with us every day, the only inconvenience being a very great irritation as the bites healed. The leeches, therefore, we did not care about, and all other hardships we determined to put up with; but the difficulty remained to find men to go with us for a moderate payment, as we were determined not to be imposed upon, and the Malays are generally rather extravagant in their demands when a trip is contemplated to Mount Ophir.

At length, however, after several failures in our negotiations, we succeeded in agreeing with an old man and four young ones to carry our baggage to the mountain, and remain there a week with us and shoot birds, etc., during the time. Besides the necessary provisions, we took the smallest possible quantity of clothes and bedding, as we had to carry collecting apparatus, guns and ammunition, and "cadjaris" (or large mats, made of the leaves of a Pandanus) to thatch our hut with. It was a drizzling morning when we started, at about six o'clock, but this was quite as pleasant for walking. For the first three miles we had a pretty good wide road, through a lofty jungle, with only occasional mudholes to wade through. We then reached a village where one of our men lived, and they proposed staying here an hour for one of the women to sift the rice, which they had found was so full of husk as to be almost uneatable. This being done, we again went on through a more open country, along paths among fruit-trees and cottages, and, crossing over a wide paddy-field valley, we reached another village about ten o'clock, where we stayed to breakfast. Starting hence about twelve, we crossed a second paddy-field, and then entered again into the gloomy jungle. Here our men loaded their guns with ball, assuring us that tigers, elephants, and rhinoceroses were all abundant. On our way they pointed out the footprints of these animals, and I was in hopes we should get a sight of them; but we went on mile after mile through the jungle and saw nothing till we again emerged at another village, where we were to get a guide who knew the road up the mountain. While resting here an examination for leeches took place, and many of our party found themselves bitten in several places. I escaped myself, by wearing my worsted socks over my trousers, and kept in their place by

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boots laced up over them. I found several leeches in my boots, vainly endeavouring to find some aperture at which to enter. The little creatures are as tough as leather; nothing will kill them but cutting them in pieces. Our guide having been agreed with, we again went on over a very swampy country, crossing numerous paddy-fields and small streams, often up to our knees in mud or water. The path was here very bad, and at the end of a long day's walk we found it rather fatiguing. At length, between five and six o'clock, we reached the house of the "Paryooloo," or head man of the district, a little old white-headed Malay, who gave us the use of the verandah of his house with much civility.

The next morning early we were again on our way, and found the path very bad till we got into a long tract of jungle, where it became worse. It was now exceedingly narrow, and at every twenty yards there was either a tree fallen across the path to climb over, or a deep mud-hole to wade through, neither of which inconveniences could be avoided. Nevertheless we walked on briskly, and our men, though each carrying a load of about eighty pounds besides his gun, kept up with us in a manner that quite astonished me. Along this path we overtook or met great numbers of Chinese and Malays going to or returning from the gold mines of Mount Ophir, which are worked by Chinese. About ten A.M. we stayed at a brook in the middle of the jungle to breakfast, before which we enjoyed a bath in the cool water. Proceeding on, in about two hours we emerged from the jungle, and had a fine view of the mountain a short distance to our right. Here was an open space of high grass once cultivated, through which the path led to a stream which comes from the mountain. Our men now told us that a path must be cut through the jungle before we could proceed, and it would be better to remain here the rest of the day, while they explored and cleared a way for us. Though I am rather doubtful now whether this was necessary, we were obliged to submit to their guidance, and the two oldest men accordingly went off with their "parangs" (long Malay knives), while we roamed about to explore the locality till dinnertime. Close above us, on a bank, were some cocoa-nut and other fruittrees, where a house had once stood, deserted, we were told, on account of the great number of elephants which infested the locality. All about we found paths trodden by these huge animals, and heaps of their dung in every direction, though all evidently some months old. The trunks of the cocoa-nut-trees were much rasped or gnawed at two

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or three different heights from three to six or seven feet. The lowest of these marks were made by deer, who eat the fibrous wood of the palm, and the higher ones, our men said, by the elephants. Our hopes were thus again excited; but our head man told us that this year the elephants had deserted the place; though only a year ago, when he slept at this very spot, he heard their loud trumpetings all around him. We were therefore condemned to a quiet night, which we passed sleeping on the ground, with our palm mats supported by poles forming a roof over us.

The following morning we started to ascend the mountain, and proceeded for about an hour through a flat swampy jungle and occasional open grassy fields, till we reached a spot higher up the river we had left. Here our guide told us was the last place we should find water till we reached the top of the mountain. We therefore stayed here to breakfast, and had a small shed made in which to leave most of our baggage, taking with us only what was absolutely necessary. The little river here rushed among large granite rocks, and on its banks were many beautiful ferns. From this spot we began to ascend, and for about an hour continued climbing up a moderately steep hill. We then rested awhile, and were somewhat disgusted when our guide told us we were not half-way up the first hill. The most conspicuous objects in this jungle were the stemless Pandani, with leaves twenty feet long, like immense pine-apples. The prickly climbing palms of the genus Calamus were also abundant, and often of immense size, and fiercely armed with thick-set spines. In the more swampy parts of the jungle through which we passed before breakfast we had been much struck by some gorgeous flowers which everywhere grew on the surface of the ground without stem or leaves; they were of the most intense crimson and yellow, and in the gloom were quite dazzling. They belonged however to a scitamineous plant which covered the low parts of the jungle, and whose leaves grow from the ground on long straight stalks eight to ten feet long. As we continued our ascent I found, by looking right and left, that the ground fell more or less abruptly on each side of us, and that we were in fact going along a ridge or spur of the mountain. At length, after a very fatiguing pull, we came to a little level ground, and then commenced a deep descent. We still kept however to the ridge, for all the way the ground fell on both sides of us, and the same was the case in the hollow or saddle at the bottom, and in the next

ascent. This was more precipitous and difficult; the vegetation became more dense and stunted, and the curious pitcher-plants began to appear. To the first summit we had ascended near 2000 feet, we then descended about 500, and we had now a fatiguing ascent of about 1200 feet to reach "Padary Batter," which was to be our resting-place. When at length we reached it I was well repaid by seeing, for the first time, something of tropical mountain vegetation. My experience had hitherto been entirely in the plains.

"Padary Batter" (the rocky field) is an expanse of even granite rock, at an angle of about 25°, and at an elevation above the sea of about 2700 feet. It is in places quite bare, in others covered with a dense mass of sedgy vegetation, a great portion of which is composed of the grassleaved Arundinacea, a beautiful Orchideous plant with purple flowers. But the most singular feature is the Conifera, which at this comparatively slight elevation suddenly appear in great abundance. There are here three species of Dacrydium, straggling irregular trees of twenty or thirty feet in height, with the leaves of a fir and the loose bark of a yew-tree. Next to these the Pitcher-plants were the most striking. They were in great abundance, and there appeared to be a great many different kinds, though, without a careful study of them, it is difficult to determine how many may be different states of the same plant, Some have magnificent purple spotted pitchers eight inches long, and of a very thick and solid texture; these are borne in the air on the end of the long twisted midrib of a large leaf. Others are almost orbicular, and grow in a cluster on the ground, the leaf being reduced to such a rudimentary state as to be merely a stalk to the pitcher. Other kinds vary from both of these; but we were more occupied in our search after their liquid contents than in the examination of their botanical peculiarities, for the thermometer stood at 85°, and since we left the bottom we had seen no water. Now however we had plenty, and by selecting those pitchers which were unopened, or were buried in moss and foliage, we obtained very drinkable water. Most of them contain a kind of insect soup, too strongly flavoured with formic acid, as I discovered, to my disgust, in my first eager attempts to get a drink. I here took an observation for the altitude with the symplesometer, and we then proceeded with the ascent. We soon again entered a scrubby jungle, where we found the fine Mount Ophir Ferns in great abundance. One of these, the Matonia pectinata of Brown, is most beautiful; the frond grows on

a slender stalk six to eight feet long, and is most elegantly shaped, forming a drooping crown of foliage. Here also grew a beautiful Cypripedium, probably C. barbatum, and a little higher up a handsome Dendrobium.

After ascending about 800 feet higher we found ourselves on a peak called "Gunong tundok" (the hanging monntain), and close opposite to us was Mount Ophir itself, with lower peaks on each side of it. The prospect of another descent, and an apparently almost vertical precipice between us and the summit, was now too much for our coolies, and three of them declared they could go no further; we accordingly left our guns and most of our bedding; and with the old man and our guide (and each of us carrying a bundle), we went on, leaving a portion of rice for those that remained. There were plenty of pitcher-plants about, so they did not want for water. The descent and succeeding ascent were very precipitous. Often we had to climb up by roots and creepers, but the distance was comparatively small, and we soon reached our resting-place, a huge overhanging rock, which forms the summit of the mountain. It is about 150 feet high, and under it is a little hollow full of water, which trickles imperceptibly. A winding craggy path leads to the summit, which is tolerably flat, but not more than thirty or forty yards in diameter, and covered with Dacrydiums, and with a shrubby vegetation of Elæocarpus, Vaccinium, Rhododendron, Eugenia, etc.; few however were in flower. We had occasional glimpses of a magnificent view, but masses of cloud continually rolling below us prevented any satisfactory panorama.

Returning to our rock we found the rice cooked, and after dinner I took an observation for the altitude, and then searched for shells and insects till dusk, with however but little success. The rest of our party had thought better of it, and had come after us; the evening was still and cloudy, and, lying on a bed of bushes and ferns, with a blanket over us, we were quite warm. During the night the thermometer did not fall below 66°.

In the morning we again went to the summit, and searched diligently for insects, etc. We were rewarded by finding a few rare *Coleoptera* and *Hemiptera*; and as the sun came out, some fine butterflies, of the genus *Pieris*, handsomely marked with red and yellow, began to appear flying round and round about the summit. I succeeded in obtaining two or three fine specimens. Of birds we saw only some swallows

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sailing over the surface of the shrubs, capturing the small flies and other insects, and a small honeysucker, which we could not approach near enough to determine accurately. Some of our men found a few small shells, two *Helices*, and a pretty little *Cyclostoma*. Occasionally we got a fine view in one direction, but the rolling masses of cloud prevented any complete panorama. I could see however sufficient to confirm me in the opinion that in this part of the peninsula there is no connected mountain-range, but isolated hills and groups of hills rising out of a great forest plain. The Moa river was a beautiful object, but the paddy-field valleys before mentioned looked more imposing, appearing in the distance like large rivers.

About ten o'clock we descended, on our way down collecting a few of the beautiful Ferns and some of the flowering plants. We had sent half of our men off early in the morning to prepare a hut for us at the foot of the mountain, where we intended to remain a week. We found the descent apparently longer and more tiring than the ascent. The day became overcast, a drizzling rain fell, and we saw neither birds nor insects to enliven the path. We reached the bottom about three P.M., and found our hut erected in a little spot which the men had cleared close by the river. We were glad to rest for the remainder of the day.

We stayed here a week, our men shooting, and we ourselves roaming about the jungle and up and down the river collecting. Insects were tolerably abundant, and I obtained numbers of new and remarkable species. Little dragon-flies of the most exquisite hues were to be found along the brook side, while on the surface of the water were "water boatmen" and "water scorpions," and a very handsome whirlywig beetle, the *Porrorhynchus marginatus*, Castl., allied to our little *Gyrinus natator*, but three times as large, of a yellowish colour, long snouted, and spined behind.

Among the curious things to be observed here was the singular colour of some of the leaves in the jungle. Some Ferns and Lycopodiums and some other plants growing near the ground were of a shining metallic blue colour, as if tinged by some gaseous exhalation. The same plant in other places I have observed of an ordinary green, so that it is due to something in the soil or atmosphere of the locality. We were not fortunate enough to see any large animals. Wild cattle abound here, but we saw only their footsteps; our men however declared one day they had seen a rhinoceros. We heard the fine Argus pheasants

#### KEW GARDEN MUSEUM.

every evening, but they were so wild that it was impossible to get a sight of them. Our rice being finished, and our boxes crammed full of specimens, we returned, our men taking us by what they termed a better road, winding about through Malay villages, and making our second day's walk upwards of thirty miles. I only stayed at Ayer Panas a sufficient time to pack up all my collections, and then returned to Malacca on my way to Singapore. We were congratulated by all our friends on having lived a week at the foot of Mount Ophir without getting fever.—A. R. W.

## Botanical Objects communicated to the KEW MUSEUM, from the AMAZON or its Tributaries, in 1853; by RICHARD SPRUCE, ESQ.

## (Continued from vol. v. p. 247.)

122-143 are instruments used or ornaments worn by the Uaupé Indians, and principally by their chiefs, or *Tucháuas*, during their festivals (called *Dabocurís*). There are duplicates of nearly all.

The Rio Uaupés joins the Rio Negro a little north of São Gabriel, and its course is nearly coincident with the actual Equator.

122. Murucú, or staff, used by the Tucháuas (chiefs) of the Uaupé Indians. The wood is of the Müra-piranga (i. e. red wood),-1915 to Bentham,—a handsome large-flowered Myrtaceous tree, growing on the inundated shores of the Rio Negro. Near the base is a hole, containing pebbles, which rattle with every motion of the Murucú; they have been inserted by heating the wood, and distending the orifice so as to admit their entrance. Of the ornaments on the upper part, the lowest is of narrow strips of the skin (with the hair) of a small black monkey called Uaïapissá, frequent near São Gabriel, and excellent eating. Then follow a few feathers of Toucan, and white down from the breast of the Mutún (Curassow). The bright blue feathers are of some small bird; they are tightly wrapped with Curauá string. The two terminal processes (stuck into clefts and wrapped with curauá, stained with carajurú) are generally two pieces of bone, and are sometimes smeared with Uirari, so as to cause the death of any person they pierce; but as the instrument is not used in war, I cannot say why it possesses this deadly apparatus.

123. Acanga-tára (i. e. head-band or tiara). (This kind is worn VOL. VII. 2 E