A N

## EPITOME

OF THE

## NATURAL HISTORY

OP THE

# INSECTS OF INDIA,

AND THE

## ISLANDS IN THE INDIAN SEAS:

COMPRISING

UPWARDS OF TWO HUNDRED AND FIFTY

#### FIGURES AND DESCRIPTIONS

OF

THE MOST SINGULAR AND BEAUTIFUL SPECIES, SELECTED CHIEFLY FROM THOSE
RECENTLY DISCOVERED, AND WHICH HAVE NOT APPEARED IN
THE WORKS OF ANY PRECEDING AUTHOR.

THE FIGURES

ARE ACCURATELY DRAWN, ENGRAVED, AND COLOURED, FROM SPECIMENS OF THE INSECTS;

THE DESCRIPTIONS

ARE ARRANGED ACCORDING TO THE SYSTEM OF LINNÆUS; WITH REFERENCES TO THE WRITINGS OF FABRICIUS, AND OTHER SYSTEMATIC AUTHORS.

By E. DONOVAN,

AUTHOR OF THE NATURAL HISTORY OF THE INSECTS OF CHINA. &c.

LONDON:

PRINTED FOR THE AUTHOR,

BY T. BENSLEY, BOLT COURT, FLEET STREET;

AND SOLD BY MESSRS. RIVINGTONS, ST. PAUL'S CHURCH YARD; WHITE, FLEET STREET FAULDER, BOND STREET; AND H. D. SYMONDS, PATERNOSTER ROW.

1800.

R. A. S. C. T.

## ADVERTISEMENT.

About four years since, the Author published an Epitome of the Insects of China, precisely in the same form, and nearly on the same plan, as those of India, which are now submitted to the public. Of the encouragement he experienced on that occasion it might be highly improper to speak with confidence at this moment, lest the sincerity of his motives should be misconceived. Whether he is entitled to expect the like degree of countenance as before, must rest alone with the candid reader to decide. For his own part he will be content to say, that the favourable reception which the Epitome of the Insects of China met with, was an irresistible inducement with the Author to undertake a similar illustration of the Insects of India; and that whatever may have been ultimately his success, he has not been less solicitous to render it, in every respect, as interesting and complete as the former work.

Various arguments might be adduced in behalf of the present publication, to one of which we cannot refrain adverting. It becomes our peculiar province at this time to awaken the public curiosity to a subject of no mean importance: we are about to consider with attention, the entomological productions of a country for which we ought to cherish the liveliest and deepest interest, as being connected intimately with the prosperity, the dignity, and honour of the British empire; -in a word, of British India, that invaluable portion of territorial domains so long retained in our possession, and finally confirmed to us by the brilliant career of glory that has so recently crowned the exertions of British valour in the eastern world. Not that the Author can be disposed to attach any greater degree of consequence to the subject of Indian Entomology in particular, than it may really merit, from the contemplation of events of such vast political magnitude as those alluded to: he is only inclined to entertain the opinion, that a work professedly treating upon the Natural History of a country, in which, as a nation, we have such an immediate interest, will not be thought destitute of some legitimate claim to public protection. Further still; he must believe that a work which, from the extent of its design and style of embellishments, is calculated to display the Entomology of India to advantage, will not prove unacceptable; and as no attempt has been hitherto made to elucidate this beautiful tribe of creatures in a similar manner, that the present work may become hereafter of some utility at least, to many individuals who reside in India, as well as to the naturalist in this country.

That the Epitome of Indian Insects is not entirely confined to those found in such parts of India as are in the British possession should be clearly stated, since it embraces, on the contrary, the most choice selection possible of those which inhabit every other part of that vast continent, and also the islands situated in the Indian seas. The far greater number of insect included in this selection, are described and figured from specimens in the cabinet of the Author, that were originally collected by the late Duchess of Portland, Mr. Tunstal, Governor Holford, many years resident in India, Mr. Ellis, Mr. Keate, Mr. Yeats, and Mr. Bailey.

The author has to acknowledge, likewise, the advantages derived occasionally from inspecting the noble collections of Mr. Francillon, Mr. Drury, and some others spoken of in the course of this work, among which he ought to mention that of A. McLeay, Esq. especially as being one from which he has received very material assistance. And lastly, the Author cannot permit the opportunity to escape him which the present instance affords, to repeat his thanks to that munificent patron of the sciences, the Right Hon. Sir J. Banks, Bart. K.B. for the unreserved access to his classic cabinet and library, with which he has been at all times indulged, in order to complete his General Illustration of Entomology, of which the Epitome of Indian Insects constitutes the second Volume.



Pearabaux Allas.

London Published as the for drawn L. E. Danner W. C. v.

#### SCARABÆUS ATLAS.

#### GENERIC CHARACTER.

Antennæ clavated; club divided into plates. Palpi four. Jaws horny, fomewhat toothlefs. Shanks of the anterior legs generally dentated.

#### SPECIFIC CHARACTER.

Thorax three horned, the fore one very fhort; on the head a fingle afcending horn.

Scababæus Atlas: thorace tricorni: anteriore brevissimo; capitis cornu adscendente. Linn. Syst. Nat.—Mus. Lud. Ulr. 6.

We are in poffeffion of a fine specimen of this gigantic insect, the only one perhaps of the kind at present in this country. It was purchased by the late Mr Tunstal from the cabinet of a Dutch governor in the East Indies, with various other uncommon insects that appear in the course of the present work. There is every reason to believe that it inhabits the island of Amboyna; or at least that our specimen was met with in that spot.

Scarabæus Atlas is one of the Linnæan species, being described by that great naturalist from an insect in the museum of the Queen of Sweden. The same is likewise figured and described by other continental writers, among whom we may mention Merian, Swammerdam, and Voet. Edwards likewise, in his History of Birds, Pl. 105, gives a figure of this and another large kind of Scarabæus. both of which he tells us had been brought from Borneo, in the East Indies, a circumstance that ought to be observed, fince other writers speak of this insect as a native of South America.

## SCARABÆUS SPINIFEX.

#### SPECIFIC CHARACTER.

Without fcutel, thorax roundish, unarmed: a recurved spine on the back of the head.

Scarabæus Spinifex: exfcutellatus, thorace rotundato inermi, occipite fpina recurva. Fab. Spec. Inf. 1. p. 29. Sp. 131.

Inhabits the coaft of Coromandel according to Fabricius, who refers to the collection of Sir J. Banks Bart. for this infect. The fame species has also been received by us from Bengal.

٠

<sup>\*</sup> Scarabæus Bilobus. Edwards erroneously imagined this to be the female, and S. Atlas the male of the fame species.

#### SCARABÆUS MILIARIS.

#### SPECIFIC CHARACTER.

Without fcutel; head and thorax unarmed: fhield of the head fix-toothed: thorax and wing cafes dark, with elevated black fpots.

Scarabæus Miliaris: exícutellatus muticus, clypeo fex dentato, thorace elytríque nigris, maculis elevatis atris. Fab. Spec. Ins. 1. p. 32. Sp. 141.

This and the following species seem at first fight to resemble each other, but are nevertheless distinct: the two kinds are represented in the same plate, both of the natural size and magnified, in order that the exact difference between them may be the more easily discriminated.

#### SCARABÆUS KŒNIGII.

#### SPECIFIC CHARACTER.

Without fcutel, unarmed, black; fhield of the head bidentated: thorax fcabrous: wing-cafes dotted with cinereous.

Scarabæus Kænigii: exfcutellatus muticus, niger, clypeo bidentato, thorace fcabro, elytris punctis cinereis. Oliv. Hist. Ins. 163.

## CETONIA HISTRIO.

#### SPECIFIC CHARACTER.

Teffaceous: two lines on the thorax: future and three fpots on the outer margin black.

Cetonia Histrio: teffacea, thoracis lineis duabus elytrorum futura maculifque tribus nigris.

Cetonia Histrio. Fab. Syst. Ent.—Oliv. Hist. Ins. pl. 10. fig. 94.

## CETONIA CÆRULEA.

#### SPECIFIC CHARACTER.

Blue; thorax lobed, immaculate: wing-cases dotted with white.

Cetonia Cærulea: cærulea, thorace lobato immaculata elytris albo punctatis. Oliv. Hist. Ins. Cet. p. 47. pl. 5. fig. 31.

Figured by Olivier from a specimen in the cabinet of the unfortunate Louis the Sixteenth, King of France. Our specimens are from Bengal.















\*Scarabæus spinifer. \*\*Cetonia Histrio. \* Miliaris Roenigii \*\* Cetonia værulea \*\*



\*Buprestis sternicornis. Buprestis chrysis.\*.
\*\*Aeneu 4 maculata \*\*\*

London Published as the Art threats AvE Denovan, June 1: Aus

## BUPRESTIS STERNICORNIS.

#### GENERIC CHARACTER.

Antennæ fetaceous, as long as the thorax. Head half retracted, or drawn back within the thorax.

#### SPECIFIC CHARACTER.

Entirely finning green, with grey impressed spots. Wing cases serrated and terminated in three teeth.

A conic projecting horn on the breast.

Buprestis Sternicornis: elytratis ferrate tridentatis: punctis cinereis impressis, sterno porrecto conico.

Linn. Syst. Nat. 2. 660. 5.

Muf. Lud. Ulr. 88.

Fal. Ent. Syft. T. 3. p. 1. p. 194. Sp. 35.

Among the Infects of China, we have already deferibed a very beautiful species of the Buprestis genus, which the natives of that country collect in confiderable numbers, and employ in the various ornaments of their dresses, arms, &c. The Buprestis Sternicornis, and Chrysis, are collected in India for similar purposes, but being scarce, are esteemed more valuable than the other kind, which they receive at a low price from China.

Both species are brought from Madras and Bombay, but generally in a mutilated state; for the Indians perforate them at both ends and string them like beads, when they collect them.

#### BUPRESTIS CHRYSIS.

#### SPECIFIC CHARACTER.

Thorax green, wing-cases chesnut colour, and terminated in three teeth. A conic projecting horn on the breast.

Buprestis Chrysis: elytris ferrato tridentatis caffaneis, flerno conico porrecto.

Fab. Ent. Syft. T. 3. p. 194. Sp. 36.

## BUPRESTIS ÆNEA.

#### SPECIFIC CHARACTER.

Shining, bronze, wing-cases terminated in three teeth.

Buprestis Ænea: elytris tridentatis corpore æneo immaculato.

Fab. Ent. Syft. T. 3. p. 1. p. 193. Sp. 31.

From the coast of Coromandel .- Cabinet of the Right Hon. Sir J. Banks, Bart.

## BUPRESTIS 4-MACULATA.

#### SPECIFIC CHARACTER.

Green, two golden fpots on the thorax, and two on each wing cafe.

BUFRESTIS 4-MACULATA: elytris integris viridis thorace postice elytrisque maculis duabus aureis.

Fab. Ent. Syst. T. 3. p. 1. p. 209. 96.

Described by Fabricius from the collection of the late Dr. Fothergill, as an Indian species. It is a minute creature, but admirably beautiful.





\* Carabus 6 maculatus. Carabus 2 maculatus.\*\*

## CARABUS 6-MACULATUS.

#### GENERIC CHARACTER.

Antennæ filiform. Palpi fix, exterior joint obtufe, and truncated. Thorax heart-fhaped, truncated at the tip behind, and margined. Wing-cafes margined.

#### SPECIFIC CHARACTER.

Apterous, black: on the thorax two white downy spots; shells with four.

CARABUS 6-MACULATUS: apterus ater, thorace maculis duabus, elytris quatuor tomentofo albis.

CARABUS SEX-GUTTATUS. Gmel. Syst. Nat. 1965. 63.—Thunb. nov. Ins. Sp. 4. p. 70. f. 84.— UNFIGURED.

One of the largest species of the Carabus genus known. Our specimen is from the cabinet of the late Duchess of Portland.

## CARABUS BIMACULATUS.

#### SPECIFIC CHARACTER.

Black, with a common interrupted yellow ftripe: antennæ and legs teftaceous.

CARABUS BIMACULATUS: niger, fafcia communi flava interrupta, antennis pedibufque testaceis.

Gmel. Syst. Nat. 1971. Sp. 107.

This neat little insect we have seen from several parts of the East Indies.



\*Paujus denticornis. Paujus thoracicus: \*\*\*Tuchtebii pilicornis\*\*

London. Published as the Set directs by K. Donosan, June 3 siles

## PAUSUS DENTICORNIS.

GENERIC CHARACTER.

Antennæ confitting of two joints, the exterior one clavated and furnished with a hook, or spinous process.

#### SPECIFIC CHARACTER.

Brown: wing-cases suscess fusions on the back, with a brown posterior spot on each: club of the antennæ foliaceous, with a single tooth.

Pausus Denticornis: brunneus elytris dorfo fufcis: macula postice brunnea, antennarum clava foliacea unidentata.

The first account of the Pausus genus appears in a small track written by Linnæus, and published at Upsal, in the year 1775, under the title of Bigas Insectorum, &c. This paper contains likewise a description of the Diopsis genus, which, together with the Pausus, are unquestionably two of the most fingular genera of the many tribes of insects hitherto discovered. Both may possibly derive some additional celebity also from the recollection that the dissertation in which they are inferted concluded the Entomological labours of that distinguished naturalist: it was the last he ever published in the department of zoology.

In the differtation alluded to, the Paufus genus is exemplified by the species Microcephalus, Diopsis by Ichneumonea, a plate with figures of both which, drawn by J. Afzelius, and engraved by Berquist, according to the descriptions. It is to this plate, and the original descriptions of Linneaus, that Fuedy is indebted folely for the account he gives of both these genera in his Archiv. der Insectengeschichte, printed at Zurich in 1783. The figures are precisely copies of those engraved by Berquist, as are likewise those contained in the French translation of that work which afterwards appeared in Paris. Indeed, as Professor Afzelius has suggested, from the repeated errors that appear in those works in translating the Linneau observations, defining the character of the Pausus genus, &c. it is very likely that neither Fuedy, nor his translators, Herbis, Gmelin, and some other writers who have treated on it, ever saw an infect of the Pausus genus; the same might be truly faid of the Diops genus also.

Thunberg during his travels through the country of the Hottentots in 1772, found two coleopterous infects which he conceived with much propriety ought to be referred to a new genus, neither of those established previous to his departure from Europe by Linnaeus being calculated to admit them. But on his return to Sweden, he found that Linnæus in his absence had described that of Pausus, or as he called it Paussus, to which they might be referred. An account of these was afterwards inferted in the Transactions of the Royal Academy of Stockholm for 1781: this paper is accompanied with a figure of only one of the infects mentioned, lineata, a species very apily named from the distinct longitudinal streak on each of the wingcases, and which is clearly of the same natural family as the Linnæan Pauss Microcephalus; the other infect described by Thunberg he calls ruber.—Fabricius consigns these, with the Linnæan infect, to his genus Cerocoma.

The lateft hiftory of the Paulus genus is from the pen of Profeffor Afzelius, a learned, copious, and elaborate paper, inferted in the fourth volume of the Transactions of the Linnaan Society. He deferibes Paulus Microcephalus, and alio another kind which he found in Africa, and names Spheroides. We may juftly regret, on the perufal of this excellent paper, that only two species of the Paulus were known to this writer.— Neither of those infects are allied to the four following species, which appear to be entirely undescribed. For this important accession of new species to a genus heretofore so little known, and, in consequence so imperfectly understood, we are indebted to the active and praise-worthy zeal of Mr. Fichtel, in compliment to whom one of them is named Fichtelii. They were all found in the vicinity of Bengal.

Paufus denticoriis is clearly of the fame natural family as the reft, having the fame kind of biarticulated antenna: the club is even much larger in proportion than in the others, and the lateral pointed procefs more confpicuous; yet according to the character laid down by Afzelius, this fhould not be admitted into the Paufus geous, the number of joints in each of the tarsit, or feet, amounting only to three; and on the contrary in the three others they are five in number, notwithflanding that without very close inspection they appear to consist only of four. From this circumflance, we are of opinion, that the Linnæan character while it passes clear of the prolixity of that established by Afzelius, is perfectly sufficient, "Antennæ calvatis, biarticulatis, clava solida uncionat." Or with the omission of "clava solida" it might be still more applicable,

## PAUSUS THORACICUS.

#### SPECIFIC CHARACTER.

Teffaceous: difk of the fhells fufcous: thorax bipartite: club of the antennæ oblong, excavated behind, cavity oval, denticulated at the margin.

Pausus Thoracecus: teflaceis, coleoptris difeo fufeis, thorace bipartite clava oblonga poffice excavata: cavitate ovali marginibus denticulatis.

The thorax in this infect is fo deeply divided acrofs the middle that it appears, at the first fight, as if it were really two. Hence it is named thoracicus, but it must be observed, at the same time, that the following differs very little in this respect, the thorax being also very deeply divided. P. thoracicus, and Fichtelii, are pretty nearly alike in other respects, and may be of the same species, differing only in the fex; the most striking difference prevails in the structure of the antennæ, the excavation in one of which is of an oval, or rather shuttle shape, and in the other pyriform.

## PAUSUS FICHTELII.

#### SPECIFIC CHARACTER.

Teflaceous: wing-cases brown, teflaceous at the anterior and posterior ends: thorax somewhat bipartite: club of the antennæ oblong, excavated behind, cavity pyriform.

Pausus Fightelii: teflaceus elyiris fufeis antice pofficeque teflaceis thorace fub-bipartito, clava oblonga poffice excavata: cavitate pyriformi.

#### PAUSUS PILICORNIS.

#### SPECIFIC CHARACTER.

Tettaceous: wing-cases pitchy: thorax bipartite, club oblong, attenuated, incurvated at the tip, and beset with a few long hairs.

Pausus Pilicornis: testaceus clytris piceis, thorace bipartito clava oblonga apice attenuata incurva pilis longis sparsis.

In the formation of the club composing the second or exterior joint of the antennæ, this species differs altogether from the others: the club is entire or not excavated, and is slightly beset with hairs. Of this fort Mr. Fichtel met with only a solitary specimen, as was likewise the case with our *Pausus Fichtelii*.



Curculio Regalis. \*\*Curculio Palmarum

#### CURCULIO REGALIS.

ROYAL CURCULIO.

#### GENERIC CHARACTER.

Antennæ club-shaped and inferted in a horny proboscis or fnout.

#### SPECIFIC CHARACTER.

Roftrum short. Blue changeable to green, velvety or like filk, with bands of reddish gold.

Curculto Regalts: brevirostris corpore viridi serico: sasciis aureis repandis. Linn. Syst. Nat. 2. 616 75.

Fab. Ent. Syst. T. 1. p. 2. p. 449. 234.

If our ideas of the term regalis will permit its application to any infect, we agree with Linnaeus in the appropriate, though pompous title beflowed on this species of Curculio. It is an aggregate of beauty and splendour: of the loveliest cœrulean, changing alternately to the deeper glow of the violet, to green, or the transstory sparkling of intermingled filver. Every space of blue is constantly contrasted with another of crimson, and which as the violet changes to blue or green, alters its aspect to a still more vivid expanse of gold. Each of those colours, the blue and red, are distinct; for an irregular space of black limits every spot and marking, and relieves the whole. As the effect of such a combination of colours in this comparatively small species is inconceivably splendid, and almost inimitable, one sigure in the plate is intended to show the natural size, and to admit of more persect delineation, another somewhat magnified is added also.

This infect, which is believed to be unique in Great Eritain, was brought from France in the collection of Mons. De Calonne, and is in the possession of the author. Linnæus met with it in one of the cabinets on the continent, and describes it as a South American insect. In the Entomologia Systematica the error is corrected, and it stands as an Indian species.

The Curculio regalis has been figured only in the unfinished productions of a French author on Exotic Coleoptera, Olivier, and the extreme searcity of that part of his work which has been published, would induce us to add this insect to our Indian species, were we uninfluenced by any other motive.

## CURCULIO PALMARUM.

PALM TREE CURCULIO.

#### SPECIFIC CHARACTER.

Roftrum long. Entirely black. Thorax broad and flattish. Wing cases short and striated.

Curculto Palmarum: longiroftris ater thorace fupra plano, elytris abbreviatis firiatis.

Fab. Ént. Syft. T. 1. p. 2. p. 395. fp. 2.

Linn. Syft. Nat. 2. 506. 1.

A very abundant species in India, where it is found chiefly on the palm trees.



Fulgora pyrorhnehus. \* \* festiva hyalinala. \*

# FULGORA PYRORHYNCHUS.

RED-TIPPED FIRE FLY.

#### GENERIC CHARACTER.

Forehead elongated. Antennæ below the eyes, and confift of two articulations. The beak or roftrum bent inwards under the body.

#### SPECIFIC CHARACTER.

Trunk afcending, apex red. Wing cases brown, pale across the middle. Wings black, green at the base.

Fulgora Pyrorhynchus: fronte rostrata adscendente apice rubra, clytris suscis fascia palidiore: alis nigris basi viridibus.—UNFIGURED.

Amongft the more valuable acquifitions, defigned to enrich this illuftration, few can afford higher gratification to the fcientific reader than this Fulgora. In fize it is inferior only to F. Lanternaria, it is an undoubted nondefeript, and may be confidered as a firthing example of the eutomological riches of a country hitherto fcarcely known, the interior of Indostan. It was originally brought from India by the late Governor Holford, and is now in the poffeffion of the author. He has fought in vain for this species in other cabinets of exotic insects, and ventures to deem his specimen unique.

In the course of our remarks on the Fulgora so abundant in China, F. Candelaria, our attention was naturally directed to the association of the property some insects of this genus are known to possess, that of emanating light; and it was to this insect we alluded in particular, when speaking of one from interior India, that enabled us to extend our observations on that property. The trunk is large, of a dark purple, thickly sprinkled with spots of white phosphoric powder, and the apex, which is scarlet, and somewhat pellucid, still retains a reddish glow, that almost convinces us the creature when living could diffuse light both from the apex and the spots. In admitting this conjecture, without wandering into the marvellous, its nocturnal appearance must be infinitely more singular than either of the known species of Fulgorae, Lampyrides, or any other luminous insect yet discovered; for, when on the wing, the illuminated apex would resemble a globule of fire, or heated iron, and the numberless phosphoric spots on the tube, form a train of glittering stars to accompany it \*.

\* As it may be thought improbable that any infect can exhibit fuch an extraordinary appearance, the words of Olivier on fome fipecies of Lampyrides may not be unfatisfactory. The infects are certainly very diffined, but reports of travellers countenance an opinion that the phofphorie emanations are analogous in the fipecies of both genera. \*The phenomena produced by a natural phofphorus is full more wonderful in fome foreign species, in which the males thine, and being provided with wings will produce in their rapid flight a thousand small stars.\*—Orivier, Biplaire des Inspectors.

.

The only figure of a Fulgora in any respect resembling this species, is given in the works of Stohl under the title of De Groote Goene Coromandelische Lantaarndrager\*; but among other evident specific distinctions we need only notice the structure of the trunk, which is altogether different, being much recurved and tapering gradually from the base to an acute point at the apex: its colour is also an olive black.

## · FULGORA HYALINATA.

CLEAR-WINGED FIRE FLY.

#### SPECIFIC CHARACTER.

Trunk conic, uneven. Wing cases transparent, streaked across with black.

FULGORA HYALINATA: fronte conica inæqualis elytris hyalinis: firiga atra. Fab. Ent. Syft. T. 4.
p. 5. fp. 16.—UNFIGURED.

Fabricius refers to the collection of Sir Joseph Banks, Bart, for this and the following species. The annexed figures are copied from the specimens that author has described.—F. Hyalinata is from Bengal.

## FULGORA FESTIVA.

HANDSOME FIRE FLY.

#### SPECIFIC CHARACTER.

Trunk conic. Wing cases brown: anterior margin green with five black spots, semi-circled with orange.

Wings red at the base.

FULGORA FESTIVA: fronte conica, elytris suscis: margine exteriore virescente; punctis nigris sulvisque, alis basi rubris. Fab. Ent. Syst. T. 4. p. 5. sp. 17.—UNFIGURED.

#### This species is from Coromandel.

\* Pl. 26, fig. 143. Green Lantern-earrier fly of Coromandel.—At the conclusion of the defcription Stohl fays, "\* In de Nederlandjök Kakimetten, &c. &c." (\*This infekt was not known in the cabinets of the low countries till within three years," anno 1780, "during which time a few were brought from Tranquebar on the Coromandel coaft, to the cabinet of natural curiofities of his Highness the Stadtholder of the United Provinces, of which I have been obligingly permitted to take the figure of a female by Monf. Vofmar, to whom I owe my public acknowledgments for it."——92. doi: 20.



London Published as the Art Server by E. Donovan Fish I I to

# V FULGORA LINEATA.

#### SPECIFIC CHARACTER.

Trunk linear, afcending: wing-cafes pale, with two brown lines.

FULGORA LINEATA: fronte roftrata lineari adfcendente, elytris pallidis: lineis duabus fufcis.

A pretty little undefcribed species found in Bengal, where it is not very uncommon.

## FULGORA PALLIDA.

#### SPECIFIC CHARACTER.

Trunk linear, afcending: thorax pale green, with red lineations; wing-cafes hyaline.

FULGORA PALLIDA: fronte rofirata lineari adfeendente thorace pallide viridi rubro lineato elytris hyalinis.

From the fame place as the preceding infect.

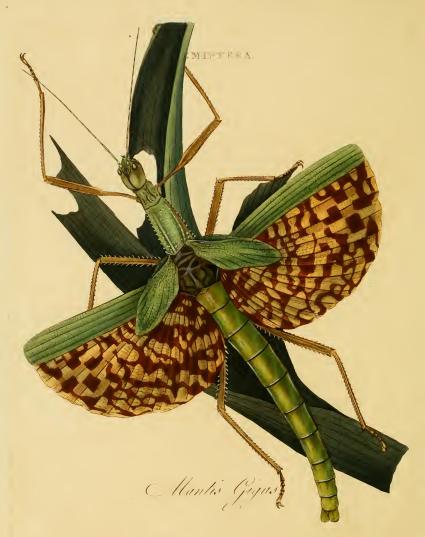
## CICADA INDICA.

#### SPECIFIC CHARACTER.

Black; on the thorax a yellow ftripe; towards the extremity of the abdomen an orange band: wing-cafes brownish olive with red veins.

Cicada Indica: nigra thorace faícia flava abdomine poítice faícia aurantia, elytris fuíco-olivaceis venis rubris,

This is unquestionably one of the most striking and magnificent species of Cicada we are acquainted with, A single specimen of this kind was discovered in Bengal by Mr, Fichtel about four years ago. It is now deposited in the Imperial cabinet at Vienna.





Mantis Viridis.



## MANTIS GIGAS.

#### GENERIC CHARACTER.

Head flaking, or unfleady, armed with jaws, and furnished with filiform palpi. Antennæ setaceous. Wings four, membranaceous, convoluted, interior ones folded. Anterior legs compressed, serated with teeth beneath, and armed with a single claw. Four posterior ones smooth, and formed for walking. Thorax linear, elongated, and narrow.

#### SPECIFIC CHARACTER.

Thorax roundish, and scabrous; wing-cases very short; legs spinous.

Mantis Gigas: thorace teretiusculo scabro, elytris brevissimis, pedibus spinosis. Linn. Gmel. 2048. Sp. 1.—Fab. Spec. Ins. 1. p. 345. n. 1.—Phasma Gigas. Fab. Ent. Syst.

The largest of this very extraordinary genus known. Our specimen is from the island of Amboyna. Rare.

#### MANTIS VIRIDIS.

#### SPECIFIC CHARACTER.

Green, thorax round, glabrous: wing-cases very short: wings pale testaceous with a green costal rib:

legs simple.

Mantis Viridis: thorace tereti glabro, elytris breviffimis, alis pallido-teflaceis cofta viridi pedibus fimplicibus.

PHASMA EDULE, fem. Lichtenstein in Linn. Trans. vol. 6. p. 13?

Perhaps more fcarce than the preceding infect. This we also received from Amboyna.

#### MANTIS SICCIFOLIA.

#### SPECIFIC CHARACTER.

Thorax denticulated: thighs oval and membranaceous,

Mantis Siccifolia: thorace denticulato, femoribus ovatis membranaccis. Linn. Mus. Lud. Ulr. 111.— Fabr. Spec. Ins. 1. p. 347. n. 14.

An erroncous opinion has prevailed pretty generally among naturalitis refpecting the colour of this infect, which when living they conceived to be fimilar to that of a dried, or withered leaf. This, it may be oblerved, is commonly the appearance of the infect after death: fuch was no doubt the colour of the fpecimens delineated by Roefel; nor can we for a moment hefitate in believing that the infect deferibed by the accurate Linnaus and Dr. Shaw exhibited the like appearance. The fpecimen of the winged infect in our cabinet has been preferred however with more than ufual care. Immediately after the death of the creature, as we have reason to suspect, the abdomen had been opened, and so nicely excavated that no portion of the entrails, or oily fluids, which would have inevitably destroyed the true colour, was allowed to remain. The natural colour is therefore preferred, which is not of a pale brown as is commonly imagined, but of a delicate, lovely green; a colour dependant, it appears, upon a thin internal coating immediately beneath the outer skin, the latter of which is perfectly transparent and destitute of any colour.

The pupa of this curious species is represented, together with the perfect infect, on the Vinca Rosea.

There is also a much smaller pupa depicted in the upper part of the plate, that was discovered in one of the islands in the Indian seas, and did belong to the celebrated Mr. Bailey, the astronomer who sailed in one of the expeditions with Captain Cook. This is of an analogous kind to that of that Mantis siccisolia, though evidently distinct. The perfect insect, and in consequence the species, is unknown to us. Our only motive for inserting it is to shew the peculiar singularity of the abdomen, in the middle of which there are two remarkable subquadrangular spots, of a filmy texture, that are transparent, and may be seen through very distinctly.



## GRYLLUS RETICULATUS.

#### GENERIC CHARACTER.

Head inflected, furnished with jaws: palpi filiform. Antennæ fetaceous, or filiform: wings four, deflected, and convolute; lower ones folded: posterior legs formed for leaping, claws double on all the feet.

#### SPECIFIC CHARACTER.

Thorax boat-shaped, posterior part produced and acute: wing-cases reticulated.

Gryllus Reticulatus: thorace cymbiformi posterius producto acuto, elytris reticulatis. Fab. Spec.

Ins. 1. p. 362. n.7.—Gmel. T. 1. p. 4 p. 2073. Sp. 4.—UNFIGURED.

An inhabitant of Bengal. There is a specimen of this very rare insect in the cabinet of Sir Joseph Banks, Bart.

#### GRYLLUS PUNCTATUS.

#### SPECIFIC CHARACTER.

Thorax warted: wing-cases black dotted with yellow: wings black.

Gryllus Punctatus: thorace verrucoso, elytris atris flavis punctatis, alis atris. Fab. Spec. Ins. 1. p. 364. n. 14.—Gmel. T. 1. p. 4. p. 2074. Sp. 143.

## GRYLLUS MONSTROSUS.

#### SPECIFIC CHARACTER.

Wings, and wing-cases terminating in a tail-like convolution.

Gryllus Monstrosus: elytris aliíque caudato-convolutis. Fab. Spec. Inf. 1. p. 353. n. 2.—Gmel.

T. 1. p. 4. p. 2059. Sp. 73.

This very fingular creature is found in the vicinity of Bengal, where, according to the information of Mr. Fichtel, it is by no means common. It lives under ground like the Gryllus Campestris, and some other well known analogous European insects of this tribe.



\* Locusta Amboinenois. Locusta citrifolia:\*.

Landon Pub? as the Act derect by E.Doners . August a store

## LOCUSTA AMBOINENSIS.

AMBOYNA LEAF-LOCUST.

#### GENERIC CHARACTER.

Antennæ fetaceous: feelers unequal: tail of the female armed with an enliform weapon.

#### SPECIFIC CHARACTER.

Green: thorax quadrangular with the angles dentated: fcutel large, brown-green; wing-cases leafformed and very broad.

LOCUSTA AMBOINENSIS: viridiffima, thorace tetragona angulis dentatis, fcutello magno fusco-viridi, elytris foliaceis latiffimis,—UNFIGURED.

The only specimen we have ever seen of this elegant species is that delineated in the annexed plate with Locusta citrifolia. This insect was received from Amboyna some years ago by Governor Holford, then resident in India, and is at this time in the collection of the Author.

Both the elytra, or wing-cafes, and the posterior part of the thorax, are of a fine delicate green: the anterior part of the thorax yellowish brown; with the head, and body fill paler. The wing-cases, as usual in this tribe, bear no very distant resemblance to the leaves of certain plants, not only in colour but also in the outline, and fill more so in the conformation of the nerves which arise and branch off towards the extremities, exactly in the same manner as the nerves arise, and ramify, from the mid-rib in the leaves of the far greater number of plants. One peculiarity in the structure of the elytra in our new species deferves remark: the scute, or rather that portion of the wing-case on the left side that folds over the back when the creature is at rest, is of a much stronger texture than any other part of the insect except the thorax, and serves as an external covering or defence to the corresponding lobe of the other wing-case, which is of a more delicate nature, confissing only of a thin and pellucid membrane, the surface of which is hyaline or glassy. The wings are remarkably tender, of a whith colour, and semitransparent.

## LOCUSTA CITRIFOLIA.

CITRON-LEAF LOCUST.

#### SPECIFIC CHARACTER.

Thorax quadrangular: crenated at the angles.

LOCUSTA CITRIFOLIA: thorace tetragona: angulis crenatis. Fab. Ent. Syft. T. 2. p. 33. Sp. 1.

GRYLLUS CITRIFOLIUS. Linn. Syft. Nat. 2. 695. 16 .- Mus. Lud. Ulr. 125.

Received with the preceding infect from Amboyna.

HEMOUPTERA.















Cimex nuarijus. z pápillójus, erucielus a z mactano uniquillatusz « vividis. ¿ percetus.

London Published as the 4st duals to them - Irel .

## HEMIPTERA.

## CIMEX NIGRIPES.

### GENERIC CHARACTER.

Snout inflected. Antennæ filiform, longer than the thorax. Wings four, folded across each other, the anterior part of the upper pair coriaccous. Back flat, thorax margined: legs formed for running.

### SPECIFIC CHARACTER.

Above fanguineous with two black fpots on the fcutel, and a fingle one on each of the wing-cafes.

Clmex Nigripes: fupra fanguineus feutello maculis duabus elytris unica nigris. Fab. Ent. Syft. T. 4.
p. 106. Sp. 101.

Cimex Melanopus. Gmel. p. 2149 .- Cimex Incarnatus. Drury. Inf. 2. t. 36. f. 5.

This beautiful fpecies bears a distant similitude to Cimex Aurantius, described by us among the infects of China; it is found in the environs of Batavia, as we are informed, but is by no means common there.

## CIMEX PAPILLOSUS.

### SPECIFIC CHARACTER.

Ovate, brown, antennæ black, fternum gibbous and compressed.

CIMEX PAPILLOSUS: ovatus fuscus, antennis nigris, sterno gibbo compresso. Fab. Spec. Inf. p. 356. Sp.112.

Profeffor Thunberg describes this Cimex under the name of Chinensis. Our figures represent both the larva and the perfect insect. That our specimens are from the East Indies need not admit of doubt; the same kind is mentioned as a native of Sierra Leona by some entomologists, perhaps without sufficient authority.

## CIMEX CRUCIATUS.

### SPECIFIC CHARACTER.

Pale yellow with black spots; scutel black with a pale cross,

Cimex Cruciatus: nigro pallidoque varius scutello nigro: cruce alba. Fab. Ent. Syft. T. 4. p. 119. Sp. 153.—UNFIGURED.

Described only by Fabricius, who acquaints us that it was found in the East Indies by Dr. Koenig. We possess a specimen of this species from Bengal.

## HEMIPTERA.

## CIMEX MACTANS.

### SPECIFIC CHARACTER.

Oblong, above rufous, two black dots on the thorax, and on the fcutel two.

Cimex Mactans: oblongus fupra rufus, thorace, fcutelloque punctis duobus nigris. Fab. Spec. Ins. 2. 366. Sp. 168.—UNFIGURED.

## CIMEX UNIGUTTATUS.

### SPECIFIC CHARACTER.

Thorax with acute spines, ferruginous; scutel marked with a large white dot.

CIMEX UNIGUTTATUS: thorace acute spinoso ferrugineis, scutello puncto magno albo notata.

UNFIGURED.

A curious species. This is a native of Madras.

# CIMEX VIRIDIS.

### SPECIFIC CHARACTER.

Thorax spinous, green: wing-cases brownish grey, scutel at the apex yellowish: spines on the thorax cylindrical, and truncated.

CIMEX VIRIDIS: thorace (pinofo viridis; elytris fu(co-cinereis, fcutello apice flavescente; thoracis fpinis cylindricis truncatis. UNFIGURED.

This rare infect is from Ceylon.

## CIMEX SERRATUS.

### SPECIFIC CHARACTER.

Thorax with acute fpines, teftaceous: wing-cases greenish: abdomen serrated.

CIMEX SERRATUS: thorace acute spinoso testaceus: elytris virescens, abdomine serrato. UNFIGURED.



London. Published as the Act directs by E. Donevan. Feb. 75 44800



\*Papilio Antenor. Papilio Antiphus.\*

London Publisher as the Act directs by E Donoran March 275 has

## PAPILIO ANTENOR.

### GENERIC CHARACTER.

Palpi two, reflected. Tongue spiral, exferted. Antennæ terminating in a club.

### SPECIFIC CHARACTER.

Wings tailed, both above and beneath black with white fpots; a marginal feries of red lunated fpots on the pofterior pair.

Papilio Antenon: alis candatis concoloribus atris albo maculatis: posticis lunulis marginalibus rubris.

Fab. Ent. Syst. T. 3. p. 1. p. 4. Sp. 9.

Papilio Antenor is an infect of very interesting figure, and may be numbered with much propriety among the rarest of the Papilio tribe found in India. It is delineated both in the works of Drury, and Jablonsky.

## PAPILIO ANTIPHUS.

### SPECIFIC CHARACTER.

Wings tailed, above and beneath black, with feven lunar red fpots on the posterior pair.

Papilio Antiphus: alis caudatis concoloribus nigris: pofficis lunulis feptem rubris. Fab. Ent. Syft.

T. 3. p. 1. p. 10. Sp. 28.—UNFIGURED.

# PAPILIO PRIAMUS.

## SPECIFIC CHARACTER.

Wings denticulated, filky: anterior pair green above with a black difk: fix black fpots on the pofterior ones.

PAPILIO PRIAMUS: alis denticulatis holofericeis: anticis fupra viridibus; macula atra, poficis maculis fex nigris, Linn. Syft. Nat. 2, 744. 1.—Mus. Lud. Ulr. 182.—Aman. Acad. 5 tab. 3.—Clerk. Icon. tab. 17.

With the exception of Papilio Ulyffes, which perhaps in point of splendour may excel, Papilio Priamus is beyond comparison the most lovely creature of this tribe of insects hitherto discovered, either in India or any other country. It is a native of Amboyna, where we understand it is extremely rare, and bears a considerable price among the Dutch amateurs in that island. We obtained a pair of them in fine condition some years ago from the cabinet of the late Mr. Tunsfall, who had purchased them in Holland, from a collection made by one of the Dutch governors in Amboyna. This rarity is figured in a resting position on the blossom of the Mimosa Grandiflora.

## PAPILIO DIEPHOBUS.

## SPECIFIC CHARACTER.

Wings tailed, brown; beneath fpotted at the base with red; seven subannular red spots on the posterior pair.

Parilio Diephobus: alis caudatis nigris fubtus bafi rubro maculatis, poficis maculis feptem rubris fubannularibus. Linn. Suft. Nat. 2, 746. 7.

## PAPILIO LACEDEMON.

## SPECIFIC CHARACTER.

Wings dentated, black, with a marginal feries of whitifh lunar fpots: posterior ones beneath brown with black lunar fpots.

Papilio Lacedemon: alis dentatis nigris: lunulis marginalibus albidis: posicis subtus brunneis: lunulis nigris. Fab. Ent. Syst. T. 3. p. 1. p. 36. Sp. 107.—UNFIGURED.



\*Papilio Empedocles. Papilio Deiphelus. \*Papilio Lucedemoù .





\* Panch Heliacon .

Papilio Falarus ...

### HEMIPTERA.

## PAPILIO PANTHOUS.

### SPECIFIC CHARACTER.

Dentated, anterior wings black, with white marks. Posterior chiefly white, with black spots.

Papilio Panthous: alis dentatis concoloribus nigris: anticis albo maculatis, pofticis maculis albis nigro fœtis. Linn. Syft. Nat. 2. 748. 17.

Fab. Ent. Syft. T. 3. p. 1. p. 18. fp. 56.

This noble species is figured in a resting position on a flower of the *Double variegated Japan Rose*, a scarce variety of the Camellia Japonica. It is one of the many magnificent natural productions of Amboyna, and is extremely rare.

The fupposed female of this insect is also considered as the female of Papilio Priamus; it is a gigantic creature, being still larger than the butterfly represented, but it is less beautiful, and the general colour an obscure reddish brown.

## PAPILIO HELIACON.

### SPECIFIC CHARACTER.

Dentated. Anterior wings uniform black: posterior pair yellow in the disk, with spots of black.

Papilio Heliacon: alis dentatis concoloribus nigris: posticis disco slavo nigro punctato.

Fab. Ent. Syst. T. 3, p. 1, p. 19, sp. 60, —UNFIGURED.

An infect from the East Indies, in the cabinet of Sir Joseph Banks, Bart.

## HEMIPTERA.

## PAPILIO IDÆUS.

### SPECIFIC CHARACTER.

Wings dentated, black. A flort yellow dash across the anterior margin of the first pair. Second pair spotted with red; a palmated mark of three red spots in the middle.

Parillo Idæus: alis dentatis nigris: anticis fafcia abbreviata flava, posticis macula palmata trifida punctifque fanguincis. Fab. Ent. Syst. T. 1. p. 1. p. 16. sp. 48.—UNFIGURED.

Brought from Madras.

# PAPILIO ASTYANAX.

### SPECIFIC CHARACTER.

Wings dentated, black. A forked broad whitifh band across the anterior pair. Posterior pair spotted with red.

Papilio Astyanax: alis dentatis concoloribus nigris: anticis fafcia fefquialtera firiata alba, pofiicis rubro maculatis. Fab. Ent. Syft. T. 3. p. 1. p. 13. 37.—UNFIGURED.

This species is described only by Fabricius in his *Entomologia Systematica*, and must not be confounded with the P. Astyanax in the *Species Inspectorum* of the same author, that being a very distinct insect, and a native of America.

# PAPILIO POLYMNESTOR.

### SPECIFIC CHARACTER.

Wings dentated, black. Posterior part of the lower pair bluish, with rows of black spots.

PAPILIO POLYMNESTOR: alis dentatis fubconcoloribus nigris: poficis apice cœrulescentibus nigro maculatis. Fab. Em. Syl. T. 3. p. 1. p. 18. fp. 55.

This remarkably fine species is sound in several parts of Asia; it is rare, but has been figured by Cramer and Jablonsky.



Lapilio Astranax.

Papilio Polymnestor.

Landon Published as the first directs by E. Donovan Das To Man



Innden Published as the Actilizates by E. Bonovan Feb\*; 41,800



Lapilio Evalthe :

London Rublished as the Act directs by E Donovan March 1, 1803



# PAPILIO EMPEDOCLES.

### SPECIFIC CHARACTER.

Wings tailed, brown: on the first pair an abbreviated band, and spots of green.

Papilio Empedocles: alis caudatis fuscis: anticis fascia abbreviata maculari viridi, posticis subtus maculis duabus anguli ani. Fab. Ent. Suft. T. 3. p. 1. p. 70. Sp. 217.—UNFIGURED.

## PAPILIO ULYSSES.

### SPECIFIC CHARACTER.

Wings tailed, black: difk radiate, blue: feven ocellated fpots on the under fide.

Papilio Ulysses: alis caudatis nigris: difco cœruleo radiante, pofficis fubtus ocellis feptem.

Linn. Syft. Nat. 2, 748. 21.

Our specimens are from one of the Dutch spice islands in the East Indies.

# PAPILIO EVALTHE.

## SPECIFIC CHARACTER.

Wings entire, black: two yellow bands on the anterior ones; and one of yellow, with red fpots on the posterior pair. Underside red, with a band of yellow spots.

Papilio Evalthe: alis integerimis nigris: anticis faíciis duabus, pofficis unica flavis maculifque rubris, fubtus rubris: faícia maculari flava. Fab. Ent. Syft. T. 3. p. 1. p. 45. Sp. 136.

A fearce and beautiful fpecies: reprefented on a fprig of the VITEX NEGUNDO, FINE-LEAVED CHASTE TREE.

## PAPILIO LETHE.

### SPECIFIC CHARACTER.

Wings dentated, tailed, and fulvous: anterior pair black, yellowish at the base, with two stripes and fulvous spots,

Papilio Lethe: alis dentato caudatis fulvis: anticis apice nigris: faſcia apiceque flavis.

Fab, Ent, Syft. T. 3. p. 1. p. 80. Sp. 250.—UNFIGURED.

## PAPILIO COCLES.

### SPECIFIC CHARACTER.

Wings flightly tailed, whitish, with streaks of brown: in the middle a whitish green stripe; on the lower ones beneath a row of occllated dots.

Papilio Cocles: alis fubcaudatis albo flavescentique firigosis: fascia media alba, posticis subtus striga punctorum occllatorum. Fab. Ent. Syst. T. 3. p. 1. p. 65. Sp. 204.—UNFIGURED.

This delicate infect is a native of Siam.

## PAPILIO TIRIDATES.

### SPECIFIC CHARACTER.

Wings dentated, with two tails: above black with blue spots, and a marginal row of pale yellow dots.

Parilio Tiridates: alis dentato bicaudatis: fupra nigris cœruleo maculatis margineque albo punctato.

Fab. Ent. Syft. T. 3. p. 1. p. 62. Sp. 195.

Inhabits Amboyna.





Papilio Tilea.



\* Papilio Hippia : Papilio Affinis: \*\* Papilio Philomela.

## PAPILIO IDEA.

### SPECIFIC CHARACTER.

Wings femi-transparent, white, veined and spotted with black.

Papilio Idea: alis denudato-albis: venis maculifque nigris. Fab. Spec. Inf. 2. p. 38, n. 160.—Gmel. p. 2258. Sp. 73.

There is a peculiar delicacy in the appearance of this large and rare Papilio that strongly recommends itself to our attention, and, notwithstanding that the figure of it has a place already in several works on entomology, impels us to include it in the present selection of Indian Infects. Clerk, Cramer, and Drury, have each given a delineation of it, the latter of whom names it Papilio Lyncous; but it is almost superfluous to add, "that it is beyond dispute the Papilio Idea of Linnæus. Our specimens are from Amboyna, and are represented on the common Indian Yellow Jaspaine.

# PAPILIO HIPPIA.

## SPECIFIC CHARACTER.

Wings greenish white, veins and border black.

Papilio Hippia: alis repandis virescenti albis: venis limboque nigris. Fab. Ent. Syst. T. 3. p. 1. p. 59. Sp. 185.—UNFIGURED.

## PAPILIO AFFINIS.

### SPECIFIC CHARACTER.

Wings dentated, black, with white fpots: border of the posterior one beneath black, spotted with yellow and white.

Papilio Appinis: alis dentatis nigris albo maculatis: poficis fubtus limbo nigro flavo alboque maculato.

Fab. Ent. Syft. T. 3. p. 1. p. 58. Sp. 181.—UNFIGURED.

# PAPILIO PHILOMELA.

### SPECIPIC CHARACTER.

Wings black, spotted with white; posterior pair radiated with yellow at the base.

Pafilio Philomela: alis repandis nigris albo maculatis: poficis bafi flavo radiatis. Fab. Ent. Syft.

T. 3. p. 1. p. 57. Sp. 179.—UNFIGURED.

From a specimen in the cabinet of the Right Hon. Sir Joseph Banks, Bart.

# PAPILIO LEUCIPPE.

## SPECIFIC CHARACTER.

Wings entire: anterior pair orange, with a black margin: posterior ones yellow.

Parillo Leucippe: alis integerrimis: auticis rubris; margine nigro, posticis flavis. Fab. Ent. Syft.

T. 3. p. 1. p. 198. Sp. 617.

 $\Lambda$  very rare and elegant species from the island of Amboyna. The under side is of a lovely yellow, with shades of orange, sprinkled with a palish brown.

# PAPILIO DANÆ.

### SPECIFIC CHARACTER.

Wings rounded, white: a reddifh (or faffron coloured) fpot at the tip of the anterior pair, with a black band, and margin; beneath a moniliform abbreviated fireak.

Papillio Danæ: alis rotundatis albis: anticis apice croceis; margine fafciaque nigris, fubtus ftriga moniliformi abbreviata. Fab. Ent. Syst. T. 3. p. 1. p. 203. Sp. 635.—UNFIGURED.

Fabricius, in addition to the specific character of this beautiful Butterfly, has given a copious and very minute description of it, as one that had not been figured by any author. Our specimen is from the Mysore country.



\* Papilio Leurippe. . Papilio Dana .\*



## PAPILIO MAERULA.

### SPECIFIC CHARACTER.

Wings entire, angulated, yellow: a black spot on the anterior pair above, and a ferruginous one beneath.

Papilio Maerula: alis integris angulatis flavis: anticis fupra macula atra, reliquis ferruginea.

Fab. Ent. Syft. T. 3. p. 11. p. 212. Sp. 664.

## PAPILIO JUDITH.

### SPECIFIC CHARACTER.

Wings entire, above and beneath alike: anterior wings white, with black veins and margin: posterior pair fulvous, with a black margin.

Papilio Judith: alis integerrimis fubconcoloribus: anticis albis; venis margineque nigris, pofficis fulvis margine nigris. Fab. Ent. Syft. T. 3. p. 1. p. 202. Sp. 632.—UNFIGURED.

## PAPILIO LIBYTHEA.

### SPECIFIC CHARACTER.

Wings rounded, entire, and white: a coftal brown fpot at the base of the anterior ones, apex brown.

Papilio Libythea: alis rotundatis integerrimis albis: anticis costa baseos apiceque suscis. Fab. Ent. Syst. T. 3. p. 1. p. 190. Sp. 591.—UNFIGURED.

## PAPILIO EUCHARIS.

### SPECIFIC CHARACTER.

Wings rounded, entire, and white: first pair fulvous at the tip, with a black margin: fecond pair immaculate.

Papilio Eucharis: alis rotundatis integerrimis albis: anticis apice fulvis; margine nigro, pofiicis immaculatis. Fab. Ent. Syft. T. 3. p. 1. p. 195. Sp. 605.—UNFIGURED.

F

## PAPILIO GENUTIA.

### SPECIFIC CHARACTER.

Wings falcated, entire, white; anterior pair fulvons at the apex: lower ones marbled with green beneath.

Papilio Genutia: alis falcatis integerrimis albis: anticis apice fulvis, pofficis viridi marmoratis.

Papilio Genutia: alis falcatis integerrimis albis: anticis apice fulvis, politicis viridi marmoratis

Fab. Ent. Syft. T. 3. p. 1. p. 193. Sp. 601.—UNFIGURED.

## PAPILIO AMARYLLIS.

### SPECIFIC CHARACTER.

Wings entire, above and beneath alike dull white, with a black lunated fpot in the middle of the anterior ones.

PAPILIO AMARYLLIS: alis rotundatis integerrimis concoloribus obscure albidis: anticis lunula media nigra.. Fab. Ent. Syft. T. 3. p. 1. p. 189. Sp. 586.—UNFIGURED.

# PAPILIO CASTALIA.

### SPECIFIC CHARACTER.

Wings entire, white; above immaculate: beneath yellowish at the base.

Papilio Castalia: alis integerrimis rotundatis albis fupra immaculatis, fubtus bafi flavefcentibus. Fab. Ent. Suft. T.3. p. 1. p. 188. Sp. 580.—UNFIGURED.

## PAPILIO SCYLLA.

### SPECIFIC CHARACTER.

Wings entire, rounded, yellow: anterior pair above white, bordered with black: all clouded beneath.

Papilio Scylla: alis integerrimis rotundatis flavis: anticis fupra albis; limbo nigro, fubtus omnibus nebulofis. Linn, Syft. Nat.—Fab. Ent. Syft. T. 3. p. 1. p. 201. Sp. 630.

The three last species are represented on Dolichos Lignosus.



\*Papilio Cacta . Papilio (\* etavius.\* \*\*Papilio Purrhis.

London Published as the Act directs by E. Donman Feb. 2 2 3800



Landon Published noths det directe by E. Danovan Pah 72 42 fon

## PAPILIO CACTA.

### SPECIFIC CHARACTER.

Wings angulated, indented: anterior pair black, purple at the base, with a fulvous spot.

Papilio Cacta: alis angulato dentatis: anticis nigris basi purpureis: macula sulva. Fab. Ent. Syst.

T. 3. p. 1. p. 116. Sp. 356.—UNFIGURED.

## PAPILIO OCTAVIUS.

### SPECIFIC CHARACTER.

Wings tailed, and black, with an abbreviated green band: beneath grey, with a brown streak.

Papilio Octavius: alis caudatis nigris: fascia abbreviata viridi, fubtus grifeis: striga fusca.

Fab. Ent. Syst. T. 1. p. 1. p. 73. Sp. 228.—UNFIGURED.

## PAPILIO PYRRHUS.

### SPECIFIC CHARACTER.

Wings tailed, brown, with a common white band.

Papilio Pyrrhus: alis caudatis fuscis, fascia communi alba anticarum dimidiata.

Linn. Syst. Nat. 2, 749.

## PAPILIO MENETHO.

### SPECIFIC CHARACTER.

Wings indented, brown, with a marginal feries of yellow spots: two ocellated marks on the under side of the posterior pair.

Papilio Menetho: alis dentatis fufcis: margine flavo maculato, poficis fubtus ocellis duobus. Fab. Ent. Suft. T. 3. p. 1. p. 83. Sp. 260.—UNFIGURED.

## PAPILIO ARCESILAUS.

### SPECIFIC CHARACTER.

Wings entire, above ferruginous, and without fpots: beneath brown, with three dark fireaks, and a

Papilio Arcesilaus: alis integerrimis fupra ferrugineis immaculatis, fubtus fufcis: firigis duabus obfcurioribus Fab. Ent. Syft. T. 3. p. 1. p. 153. Sp. 470.—UNFIGURED.

Fabricius describes this species from a specimen native of Siam.

It is a native of Siam.

## PAPILIO BLANDINA.

### SPECIFIC CHARACTER.

Wings indented, black, fpotted with white: a blue fireak at the base of the anterior pair; and another at the margin of the posterior ones.

Papilio Blandina: alis dentatis atris albo maculatis: anticis firia bafeos poficis firiga marginali cœruleis. Fab, Ent. Syβ. T. 3, p. 1. p. 129. Sp. 397.—UNFIGURED.

## PAPILIO LIBERIA.

### SPECIFIC CHARACTER.

Wings indented, fulvous, with a black curved mark at the tip of the anterior pair: a black dot on the posterior ones above, and three ocellated spots beneath.

Papilio Liberia: alis dentatis fulvis: anticis arcu apicis, pofficis fupra puncto atro, fubtus tribus occilaribus. Fab. Ent. Syft. T. 3. p. 1. p. 135. Sp. 418.—UNFIGURED.

# PAPILIO PHEGEA.

## SPECIFIC CHARACTER.

Wings indented, brown; with either a white or ferruginous band on the anterior pair: difk of the posterior ones ferruginous or white; beneath paler with black waves.

POPILIO PHEGEA: alis dentatis fuscis: anticis fascia posticis disco ferrugineo aut albo, subtus pallidioribus nigro undatis. Fab. Ent. Syst. T. 3. p. 1. p. 132. Sp. 407.—UNFIGURED.



Papilio . Phegea \* \*\* Fatima . Thyelia . \*\*



\*Papilio Nero - Papilio Gnidia: \*Papilio Harba

London Published as the Act derests to A. Democan South Story

# PAPILIO FATIMA.

### SPECIFIC CHARACTER.

Wings flightly, tailed black, with a common yellow; pofterior ones with the band abbreviated and red fpots.

Papilio Fatima: alis subcaudatis atris: fascia communi slava, posticarum abbreviata maculisque rubris.

Fab. Ent. Syst. T. 3. p. 1. p. 81. Sp. 252.—UNFIGURED.

# PAPILIO THYELIA.

### SPECIFIC CHARACTER.

Wings dentated, fulvous with black fpots: on the base of the posterior pair beneath a white band, and two scarlet dots at the base.

Parilio Thyelia: alis dentatis fulvis nigro maculatis: poficis fubtus fafcia alba punctifque duobus bafeos coccineis Fab. Ent. Syft. T. 3. p. 1. p. 142. Sp. 437.—UNFIGURED.

## PAPILIO NERO.

### SPECIFIC CHARACTER.

Wings entire, fanguineous, margin brownish: posterior wings beneath orange.

Papilio Nero: alis integerrimis fanguineis: margine fuscente, posicis subtus aurantiis.

Fab. Ent. Syst. T.3. p. 1. p. 153. Sp. 471.—UNFIGURED.

The Fabrician description of this fine Papilio is taken from a specimen in the British Museum.

## PAPILIO GNIDIA.

### SPECIFIC CHARACTER.

Wings dentated, teflaceous: anterior pair brown at the apex, with a white band; pofterior ones with a fulvous fireak, and black lunated fpots.

Papilio Gnidia: alis dentatis teftaceis anticis apice fufcis, fafcia alba, pofticis firiga fulva: lunulis nigris. Fab. Ent. Syft. T. 3. p. 1. p. 137. Sp. 422.—UNFIGURED,

## PAPILIO HIARBA.

### SPECIFIC CHARACTER.

Wings dentated, black, with a common white band, abbreviated on the anterior pair.

PAPILIO HIARBA: alis dentatis nigris: fafcia communi alba anticarum abbreviata. Fab. Ent. Syft.

T. 3, p. 1, p. 128. Sp. 391.

# PAPILIO ISIS.

### SPECIFIC CHARACTER.

Wings dentated; anterior pair black with the difk fanguineous: beneath entirely lineated with green.

Papilio Isis: alis dentatis: anticis atris; macula difci fanguinea, omnibus fubtus viridi lineatis.

Fal. Ent. Suft. T. 3. p. 1. p. 124. Sp. 377.—UNFIGURED.

# PAPILIO PHORCYS.

### SPECIFIC CHARACTER.

Wings dentated, flightly tailed, and brown: beneath obscurely streaked, with two cinereous spots on the posterior pair.

Papilio Phoreys: alis dentato fubcaudatis fufcis: fubtus obfeurius ftrigofis: pofticis punctis duobus cinereis. Fab. Ent. Syf. T. 3, p. 1, p. 80, Sp. 248.—UNFIGURED.

# PAPILIO ERIBOTES.

## SPECIFIC CHARACTER.

Wings flightly tailed, fulvous, blueish at the base: beneath grey.

Papilio Eribotes: alis fubcaudatis fulvis bafi cærulefcentibus, fubtus grifcis. Fab. Ent. Syft. T. 3.
p. 1. p. 73. Sp. 229.—UNFIGURED.



· Papilio Isis. Papilio Phoreps: :Eribotas Psidores:



· Papilio Cualippe. - Papilio Ot irece · Papilio Euronimene.

enter than anythe treet of the the

## PAPILIO ISIDORE.

### SPECIFIC CHARACTER.

Wings hooked, tailed, and fulvous: two pale dots in the middle of the anterior ones; tip black.

Papilio Isidore: alis falcato caudatis fulvis: anticis punctis duobus mediis pallidis apiceque nigris.

Fab. Ent. Syft. T. 3. p. 1. p. 78. Sp. 244.

### PAPILIO CYDIPPE.

#### SPECIFIC CHARACTER.

Wings dentated, black with a common rufous difk: beneath testaceous at the base, and varied with black and blue.

PAPILIO CYDIPPE: alis dentatis nigris albo maculatis: area communi rufa, fubtus bafi teflaceis nigro cœruleoque variis. Linn. Suft. Nat. 2. 776. 136.—Fab. Ent. Suft. T. 3. p. 1. p. 112. Sp. 345.

# PAPILIO DIRCE.

## SPECIFIC CHARACTER.

Wings angulated, brown, with a yellowish band on the anterior ones: beneath undulated with blackish brown stripes.

Papilio Dirce: alis angulatis fuícis: faícia anticarum flavefcente, fubtus nigro undulatis. Linn. Syft. Nat. 2. 778. 771.—Fab. Ent. Syft. T. 3. p. I. p. 123. Sp. 376.

## PAPILIO EURINOME.

#### SPECIFIC CHARACTER.

Wings indented, black, fpotted with white: posterior pair white at the base.

Papilio Eurinome: alis dentatis nigris albo maculatis: poficis bafi albis. Fab. Ent. Syft. T. 3. p. 1. p. 57. Sp. 178

## PAPILIO HIPPONA.

### SPECIFIC CHARACTER.

Wings indented, tailed, varied with yellow and black: on the posterior ones four white dots.

Papilio Hippona: alis dentato caudatis flavo nigroque variis: poficis punctis quatuor albis. Fab. Ent. Syst. T. 3. p. 1. p. 180. Sp. 559.

## PAPILIO CYANE.

### SPECIFIC CHARACTER.

Wings indented, black, a white band on the anterior wings; difk of the posterior ones white, dotted with black.

Papilio Cyane: alis dentatis nigris: anticis fascia, posticis disco nigro punctato albis. Fab. Ent. Syst. T. 3. p. 1. p. 115. Sp. 352.

# PAPILIO COENOBITA.

#### SPECIFIC CHARACTER.

Wings indented, black: anterior ones with a white streak and spots; posterior pair with a white band above, beneath white with four bands, and marginal spots of brown.

PAPILIO COENOBITA: alis dentatis nigris: anticis firia maculifque, pofficis fupra fafcia alba, fubtus albis: fafciis quaturor maculifque marginalibus fufcis. Fab. Ent. Syst. T. 3. p. 1. p. 247. Sp. 769.—UN-FIGURED.

## PAPILIO COCALIA.

#### SPECIFIC CHARACTER.

Wings dentated, brown: anterior ones fpotted with black and yellow; beneath entirely greyifh, with a row of white dots.

PAFILIO COCALIA: alis dentatis fuſcis: anticis nigro flavoque maculatis, ſubtus omnibus griſeis. ſtriga puuctorum alborum. Fab. Ent. Syst. T. 3. p. 1. p. 250. Sp. 777.—UNFIGURED.



\*Papilio Alppona. Papilio Cyane.\* \*\*Papilio [oenakita.

Zondon Published as the dot direct by Z.Donovan Feb ? 2 f2800.





Papilio Contia.

: Baldus.

Papilio Sophia

- Huge

# PAPILIO SOPHIA.

### SPECIFIC CHARACTER.

Wings dentated, variegated with yellow, fulvous, and black: margin brown, dotted with black, and white lunated fpots on the posterior ones.

Papilio Sorbia: alis dentatis flavo fulvo nigroque variis: margine fufco nigro punctato lunulifque pofticarum albis. Fab. Ent. Syft. T. 3, p. 1, p. 248. Sp. 771.—UNFIGURED.

# PAPILIO AUGE.

#### SPECIFIC CHARACTER.

Wings dentated, brown: anterior ones fasciated with greenish: posterior pair fulvous spotted with black, with a black spot at the base beneath.

Papilio Auge: alis dentatis fafciis: anticis fafciis viridibus, pofficis fulva nigro maculata, fubtus bafcos atro. Fab. Ent. Syft. T.3. p. 1. p. 248. Sp. 773.—UNFIGURED.

# PAPILIO BALDUS.

### SPECIFIC CHARACTER.

Wings entire, brown: an occllated fpot with a double pupil on the anterior wings; on the posterior pair four upon the upperside, and fix beneath.

Papilio Baldus: alis integerimis fuícis: anticis utrinque ocello; pupilla gemina, pofiicis fupra ocellis quatuor, fubtus fex. Fab. Ent. Syft. T. 3. p. 1. p. 223. Sp. 699.—UNFIGURED.

# PAPILIO PERIANDER.

### SPECIFIC CHARACTER.

Wings tailed, above and beneath white striped with yellow: tips brown with white streaks.

Papilio Periander: alis caudatis concoloribus albis flavo fafciatis fufcis albo ftrigofis. Fab. Ent. Syft.

T. 3. p. 1. p. 67. Sp. 208.—UNFIGURED.

A rare species; from the Myfore country.

# PAPILIO ALLICA.

### SPECIFIC CHARACTER.

Wings dentated, above and beneath obfcure fulvous, with numerous black dots, and fmaller ones of white.

Papilio Allica: alis dentatis fubconcoloribus obscure fulvis: punctis nigris numerosis albo fætis.

Fab. Ent. Syst. T. 3. p. 1. p. 244. Sp. 761.

Inhabits Siam.

# PAPILIO OBRINUS.

#### SPECIFIC CHARACTER.

Wings entire, above brown, with a green ftripe on the anterior pair, and a ferruginous fpot on the posterior ones: beneath greenish with a white band.

Papilio Obrinus: alis integerrimis fupra fufcis: fafcia cœrulea maculaque ferruginea, fubtus viridibus: fafcia albicante. Linn, Suft. Nat. 2, 766, 113.

## PAPILIO LIRIA.

### SPECIFIC CHARACTER.

Wings fomewhat dentated, cinereous, waved with brown: on the anterior wings a white stripe, and four white occllated spots on the posterior pair.

Parillo Liria: alis fubdentatis cinereis fuíco undatis: anticis faícia alba, poficis punctis quatuor ocellaribus albis. Fab. Ent. Syft. T. 3. p. 1. p. 239. Sp. 747.—UNFIGURED.

# PAPILIO CRANTOR.

#### SPECIFIC CHARACTER.

Wings entire, brown; on the posterior pair above an ocellated spot with a double pupil: beneath five, the first and fourth bipupillated.

PAPILIO CRANTOR: alis integerrimis fufcis: posticis fupra ocello unico bipupillato fubtus quinque primo quartoque bipupillato. Fab. Ent. Syft. T. 3. p. 1. p. 158. Sp. 489.—UNFIGURED.



Papilio Periander.\* \* Allica .Obrinus.\*\* \*\* Crantor: Liria :\*\*

London Published as the Act directs by E. Donovan April stilloo



\* Papilio Pann : Papilio Pindarus.\* \*\* Papilio Uulcanus.

London Published as the Act directs by E. Bonovan Febra 1980

# PAPILIO PANN.

### SPECIFIC CHARACTER.

Wings tailed, brown; a yellow foot on the anterior pair, and another with a black mark in the middle, near the margin of the posterior pair: beneath, cinereous, with two black eyes in the anal angle.

HESPERIA PANN: alis caudatis fuſcis; anticis macula ſulva poſiicis atra ſubmarginali, ſubtus cinercis: ocellis duobus anguli ani. Fab. Ent. Syft. 2. T. 3. p. 1. p. 276. ſp. 67.—UNFIGURED.

### PAPILIO PINDARUS.

### SPECIFIC CHARACTER.

Three fhort tails, blue furrounded with black. Beneath brown, with spots of red and filver.

HESPERIA PINDARUS: alis fubtricaudatis cœruleis: limbo atro, fubtus fufcis argenteo fulvoque maculatis.

Fab. Ent. Syft. T. 3. p. 1. p. 262. 15.

Fabricius deferibes this beautiful infect as a native of India, and for its figure refers only to the original drawings of William Jones, Efq. We have afcertained the species from those drawings, collated with the manuscript in the hand-writing of Fabricius, and on this authority give it a place in our selection of Indian Infects,

# PAPILIO VULCANUS.

## SPECIFIC CHARACTER.

Two tails. Above dark brown with fulvous spots. Beneath yellow, variegated with fulvous streaks and filvery interlineations.

HESPERIA VULCANUS: alis bicaudatis fupra fufcis fulvo maculatis, fubtus firigis fulvis flavis argenteifque variegatis. Fab. Ent. Syft. T. 3. p. 1. p. 264. fp. 22.

The figures of Papilio Vulcanus reprefent the male infect, the female is rather larger, the colours on the under fide more obfcure, and the filver firipes broader.

# PAPILIO CHITON.

#### SPECIFIC CHARACTER.

Three tails. Blue, furrounded with dark brown. Beneath yellowish white streaked with black.

HESPERIA CHITON: alis tricaudatis cœruleis: limbo fufco, fubtus flavefcenti albis nigro fafciatis.

Fab. Ent. Syft. T. 1. p. 2. p. 262. 16.

The P. Phaleros of Linnæus agrees with this infect except the fpot in the upper wing.

# PAPILIO HERODOTUS.

### SPECIFIC CHARACTER.

Tailed. Above, wings blue. Beneath green, with a row of black and white points on the pofterior pair.

HESPERIA HERODOTUS: alis caudatis cœruleis fubtus viridibus: pofficis firiga punctorum nigro alborum.

Fab. Ent. Syft. T. 3. p. 1. p. 286. fp. 100.—UNFIGURED.

# PAPILIO PYTHAGORAS.

#### SPECIFIC CHARACTER.

Three tails. Above black, disk and posterior margin yellow. Beneath white, varied with streaks of black brown; a broad white space across the middle.

Hesperia Pythagoras: alis tricaudatis atris: limbo flavo, fubtus nigris albo variis fafciaque media alba.

Fab. Ent. Syft. T. 3. p. 1. p. 259. fp. 6.— UNFIGURED.

## PAPILIO FLORUS.

### SPECIFIC CHARACTER.

Wings entire, red, margin black. The base of the under wings spotted with black.

Hesperia Florus: alis integerrimis fulvis: margine nigro fubtus bafi nigro punctatis.

Fab. Ent. Syft. T. 3. p. 1. p. 310. fp. 176.—UNFIGURED.

# PAPILIO LISTAS.

#### SPECIFIC CHARACTER.

Three tails. Above, anterior wings dark brown with an orange fpot. Beneath, posterior wing white with black and brown marks.

Hesperia Lisias: alis tricaudatis: anticis fuscis; macula fulva, politicis fubtus albis nigro maculatis.

Fab. Ent. Syft. T. 3. p. 1 p. 261. fp. 12.—UNFIGURED.



\* Lapilio Chiton: Papilio Herodolus.\*\*

\*\*Pythagorus. Florus!\*\*

Jondon Published as the Lot directs by EDoneson March : \$1800



\* Papilio Lisias. Papilio Sophocles.\* \*\* Jarbus.Thales\*\*

## PAPILIO SOPHOCLES.

### SPECIFIC CHARACTER.

Two tails. Above black, the whole disk blue. Beneath white, with yellowish undulated marks: a red spot at the apex of the posterior pair.

HESPERIA SOPHOCLES: alis bicaudatis nigris: difco communi cœruleo, fubtus albis: firigis undatis flavefcentibus, policis puncto apicis fulvo. Fab. Ent. Syft. 3, p. 267. 31.—UNFIGURED.

# PAPILIO JARBAS.

### SPECIFIC CHARACTER.

Tailed. Above, fulvous, furrounded with dark brown. Beneath cinereous, fireaked with white: two black fpots on the posterior pair.

HESPERIA JARBAS: alis caudatis fulvis: limbo fufco, fubtus cinercis: ftriga alba, pofticis punctis duobus atris. Fab. Ent. Syft. T. 3. p. 1. p. 276. fp. 65.—UNFIGURED.

Brought from Siam. Cabinet of the Right Hon. Sir Joseph Banks, Bart.

# PAPILIO THALES.

### SPECIFIC CHARACTER.

Two tails. Black. Under fide marked with blue lunar fpots; and a double abbreviated band of gold next the pofterior margin of the lower wings.

HESPERIA THALES: alis bicaudatis atris fubtus lunulis cœruleis: poficies fafcia abbreviata fubmarginali aurea. Fab. Ent. Syft. 3. 268. 35.—UNFIGURED.

## PAPILIO MELIBŒUS.

### SPECIFIC CHARACTER.

Two tails. Above, difk bluifh, furrounded with brown. Beneath yellowifh, anterior wings ftreaked across with brown, posterior with black. In the anal angle a blue circle enclosing two black spots.

HESPERIA MELIBŒUS: alis bicaudatis cœrulefcentibus: limbo fuíco, fubtus flaveſcentibus: anticis fuſco poſticis nigro ſtrigoſs, angulo ani atro: annulis cœruleis. Fab. Ent. Syft. 3. 271. /p. 44.—UNFIGURED.

# PAPILIO TYRTÆUS.

### SPECIFIC CHARACTER.

Two tails. Above brown. An undulated white fireak, and black margin, with two intermediate red fpots on the under fide of the pofferior wings.

Hesperia Tyreleus: alis bicaudatis fuícis: pofticis fubtus ftriga undata alba lunulifque marginalibus nigris, intermediis rufis. Fab. Ent. Syft. 3, 271. fp. 46.—UNFIGURED.

## PAPILIO XENOPHON.

#### SPECIFIC CHARACTER.

Two tails. Above brown, difk yellow. Beneath cinercous, a white and brown fireak acrofs the middle.

Hesperia Xenophon: alis bicaudatis fufcis: difco flavo, fubtus cinerco firiga media alba fufcæ innata.

Fab. Ent. Syft. 3. 272. fp. 47.—UNFIGURED.

# PAPILIO ACHÆUS.

### SPECIFIC CHARACTER.

Two very flort tails. Above brown, with yellow fpots. Beneath yellow fpotted with gold.

Hesperia Achæus: alis fub-bicaudatis fufcis: maculis flavis, fubtus flavis duro maculatis.

Fab. Ent. Syft. 3, 273. fp. 53.

# PAPILIO PHORBAS.

#### SPECIFIC CHARACTER.

Wings tailed. Above brown, difk white. Beneath white, with cinercous streaks: two black spots in the anal augle of the lower wing.

Hesperta Phorbas: alis caudatis fuscis: disco albo, subtus albis cinereo strigosis: punctis duobus anguli ani atris. Fab. Ent. Syst. 3, 277. sp. 68.—UNFIGURED.



\* Acheus . Phorbas ...

# PAPILIO REGULUS.

### SPECIFIC CHARACTER.

Wings entire, black, with two yellow bands: the posterior one on the upper wings interrupted.

HESPERIA REGULUS: alis integerrimis nigris: sasciis duabus slavis; postica anticarum interrupta.

Fab. Ent. Syst. T. 3. p. 1. p. 318. Sp. 205.—UNFIGURED.

# PAPILIO LUCANUS.

#### SPECIFIC CHARACTER.

Wings entire, black, difk yellow: posterior pair beneath red with square brown spots.

HESPERIA LUCANUS: alis integerrimis nigris: difco flavo, posticis subtus rubris: maculis quadratis fuscis. Fab. Ent. Suft. T. 3. p. 1. p. 322. Sp. 221.—UNFIGURED.

## PAPILIO SALUSTIUS.

### SPECIFIC CHARACTER.

Wings entire, fulvous varied with black: anterior ones beneath fpotted with black; posterior pair cinercous with black spots.

HESPERIA SALUSTIUS: alis integerrimis fulvis nigro variis: anticis fubtus nigro punctatis, poliicis cinereis fufco maculatis. Fab. Ent. Syft. T. 1. p. 3. p. 310. Sp. 175.—UNFIGURED.

# PAPILIO TARQUINIUS.

### SPECIFIC CHARACTER.

Wings entire, black: an oblong finuated yellow foot at the base of the first pair: lower ones yellow, spotted with black at the anal angle.

HESPERIA TARQUINIUS: alis integerrimis nigris: anticis macula oblonga baseos finuata, posticis angulo ani flavo nigro maculato. Fab. Ent. Suft. T. 1. p. 3. p. 319. Sp. 207.—UNFIGURED.

# PAPILIO ÆMULIUS.

### SPECIFIC CHARACTER.

Wings entire, cinereous, fpotted with brown and white: posterior wings pale above; the lower surface entirely dotted with brown.

HESPERIA ÆMULIUS: alis integerrimis cinereis fufco alboque maculatis: pofticis fupra pallidis, fubtus omnibus fufco pun@atis. Fab. Ent. Syft. T. 1. p. 3. p. 322, Sp. 219,—UNFIGURED.

## PAPILIO NUMITOR.

### SPECIFIC CHARACTER.

Wings entire, fuscous: disk of the posterior pair above yellow; beneath entirely yellow and without spots.

Hesperia Numitor: alis integerimis suscis: posticis supra disco stavo, subtus totis slavis immaculatis.

Fab. Ent. Syst. T. 1. p. 3. p. 324. Sp. 229.—UNFIGURED.



Lapilio Tarquinius. - Papilio Æmulius: «Capilio Numitor.)



Landon Bubbahad as the sick derests by S. Demovien, April 11800

# PAPILIO PLINIUS.

### SPECIFIC CHARACTER.

Wings furnished with a tail, white, variegated with brown: a double golden fpot in the anal angle of the posterior wings.

HESPERIA PLINIUS: alis caudatis albo fuscoque variis, posticis subtus puncto gemino aureo anguli ani.

Fab. Ent. Suß. T. 3. p. 1. p. 284. Sp. 92.—UNFIGURED.

# PAPILIO PLATO.

#### SPECIFIC CHARACTER.

Wings furnished with a tail. Above blue, with a deep brown border. Beneath grey, with white undulated streaks; a black eye, having two white central spots near the posterior margin of the second pair.

HESPERIA PLATO: alis caudatis cœruleis: limbo fuíco fubtus cinereis albo undatis: pofticis ocello atro: pupilla gemina. Fab. Ent. Syft. T. 3. p. 1. p. 288. Sp. 103.—UNFIGURED.

## PAPILIO HIPPOCRATES.

### SPECIFIC CHARACTER.

Wings furnished with a tail. Above brown, first pair tipped with white. Beneath white, with black spots.

Hesperia Hippocrates: alis caudatis fufcis apice albis fubtus albis nigro punctatis.

Fab. Ent. Syft. T. 3. p. 1. p. 288, Sp. 105.—UNFIGURED.

## PAPILIO THEOCRITUS.

#### SPECIFIC CHARACTER.

Wings furnished with a tail; above greenish, anterior margin and apex dark; beneath brown spotted with yellow.

HESPERIA THEOCRITUS: alis caudatis virescentibus: costa obscuriore, subtus nigris slavo punctatis.

Fab. Ent. Syst. T. 3. p. 1. p. 289. Sp. 106.—UNFIGURED.

## PAPILIO PARRHASIUS.

#### SPECIFIC CHARACTER.

Wings furnished with a tail. Above either blue or brown, with a row of white circles along the posterior margin of the second pair. Beneath ash-coloured, streaked with white: gold spots near the tail.

Hesperia Parrhasius: alis caudatis cœruleis (fuícis) fubtus cinereis albo fitigofis: poficis punctis marginalibus aureis. Fab. Ent. Syft. T. 3. p. 1. p. 289. Sp. 108.—UNFIGURED.

The two fexes of Papilio Parrhafius are very diffimilar. The female is largeft, the disk of the wings blue, the male is brown with the slightest tinge of that colour.

# PAPILIO BIBULUS.

#### SPECIFIC CHARACTER.

Wings entire, above brown; beneath white, with a transverse streak of brown and silver circles.

HESPERIA BIBULUS: alis integerrimis suscis subtus albis: possicis sascia argentea susceptual suscission of the su

## PAPILIO HYLAX.

#### SPECIFIC CHARACTER.

Wings entire, above brown, without fpots; beneath ash-colour, spotted with black.

Hesperia Hylax: alis integerrimis supra suscis immaculatis subtus cinereis nigro punctatis.

Fab. Ent. Suft. T. 3. p. 1. p. 304. Sp. 152.

# PAPILIO CŒNUS.

## SPECIFIC CHARACTER.

Wings entire, white, anterior and exterior margins of the first pair brown, and enclosing two white spots.

HESPERIA CœNUS: alis integerrimis albis: anticis margine exteriore fuſco albo maculato.
Fab. Ent. Sufi. T. 3, p. 1. Sp. 308. Sp. 169.—UNFIGURED.



\* Papilio Bibulus. \* Aylax . frenus!; \* Livius Romulus;\* "Itolomaus . Vridius...

# PAPILIO LIVIUS.

### SPECIFIC CHARACTER.

Wings entire, above black, with a large blue fpot in the disk of each; beneath greyifth, with several transverse red bars edged with silver across the posterior pair.

HESPERIA LIVIUS: alis integerrimis atris: macula difci cœrulea poficis fubtus cinereis: fafciis rufis argenteo marginatis. Fab. Ent. Syft. T. 3. p. 1. p. 315. Sp. 194.—UNFIGURED.

# PAPILIO ROMULUS.

### SPECIFIC CHARACTER.

Wings entire, above uniformly brownish-black: beneath green, with a rusous spot near the exterior margin of the posterior wings.

Hesperia Romulus: alis integerrimis fuscis subtus viridibus: posticis macula rufa.

Fab. Ent. Syst. 7. 3. p. 1. p. 316. Sp. 195.—UNFIGURED.

# PAPILIO PTOLEMÆUS.

#### SPECIFIC CHARACTER.

Wings entire, above ferruginous streaked with brown; beneath blue, pale at the base.

Hesperia Ptolemæus: alis integerrimis ferrugineis susco strigosis subtus corruleis basi pallidioribus.

Fab. Ent. Syst. T. 3. p. 1. p. 319. Sp. 209.—UNFIGURED.

# PAPILIO OVIDIUS.

### SPECIFIC CHARACTER.

Wings entire, fpotted with gold: above fulvous, beneath yellowish.

Hesperia Ovidius: alis integerrimis auro punctatis fupra fulvis, fubtus flavescentibus.

Fab. Ent. Syft. T. 3. p. 1, p. 320. Sp. 212.

Papilio Bibulus, Hylax, Cœnus, Livius, Romulus, Ptolemæus, and Ovidius, are reprefented on the Adiantum fucculentum.



Frenders Buddeshad as the day of the total and the total a

## PLEBEII URBICOLÆ.

# PAPILIO CURIUS.

SPECIFIC CHARACTER.

Very long tails. General colour black: a transparent and a white ftripe across the anterior wings, the latter extending across the posterior ones.

Papilio Curius: alis caudatis concoloribus atris: anticis fafciis duabus hyalinis, pofticis unica alba.

Fab. Ent. Syft. T. 3. p. 1. p. 28. fp. 81.—UNFIGURED.

This extraordinary creature feems to partake of characters common to the Equites, as well as the Plebeii. Fabricius, who deferibes it, refers it to the Ea. Ach. in the Entomologia Systematica, but we are perfuaded its characters are more decifively those of the Plebeii. The specimen is from Siam.—Cabinet of the Right Hon. Sir Joseph Banks, Bart.

# PAPILIO PROPERTIUS.

SPECIFIC CHARACTER.

Wings divaricated, black, spotted with yellow. Beneath, posterior pair barred alternately with rusous and yellow.

Hesperia Properties: alis divaricatis nigris flavo maculatis: posticis subtus sasciis rusis slavisque alternis.

Fab. Ent. Syst. T. 3. p. 1. p. 325. sp. 234.—UNFIGURED.

# PAPILIO TIBULLUS.

SPECIFIC CHARACTER.

Wings entire. Anterior pair black, fpotted with yellow. Pofterior pair yellow furrounded with black.

Hesperia Tibulus: alis integerrimis: anticis nigris flavo maculatis, pofticis flavis: limbo nigro.

Fab. Ent. Syft. T. 3. p. 1. 326. ff. 235.—UNFIGURED.

# PAPILIO AUGIAS.

SPECIFIC CHARACTER.

Wings divaricated, fulvous, a row of black foots along the exterior margin, and an oblique black mark in the middle of the anterior pair.

HESPERIA AUGIAS: alis divaricatis fulvis: fascia obliqua margineque postico nigris.

Linn. Syft. Nat. 2. 794.-257.

Amoen. Acad. 4. 410. 80.

Fab. Ent. Syft. T. 3. p. 1. p. 327. /p. 239 .- UNFIGURED.

## PLEBEII URBICOLÆ.

# PAPILIO ORIGINES.

#### SPECIFIC CHARACTER.

Wings divaricated. Uniform brown; base of the anterior wings more testaccous: an oblique row of whitish spots nearly across the middle.

HESPERIA ORIGINES: alis divaricatis concoloribus fuícis: ftriga punctorum alborum, anticis basí testaceis.

Fab. Ent. Syst. T. 3. p. 1. p. 328. fp. 245.—UNFIGURED.

## PAPILIO PLUTARGUS.

### SPECIFIC CHARACTER.

Wings entire, above dark brown, powdered with gold: a yellow fpot at the tip of the anterior wings: the exterior margin testaceous.

Hesperia Plutargus: alis integerrimis fuscis auro irroratis: anticis supra macula apicis, subtus margine exteriori testaccis. Fab. Ent. Syst. T. 3. p. 1. p. 329. sp. 251.—UNFIGURED.

# PAPILIO EPICTETUS.

#### SPECIFIC CHARACTER.

Wings entire, above blackifh, difk yellow: a brown fpot along the centre of the anterior wing, having a lunar yellow mark in the middle. Beneath yellow, without fpots.

HESPERIA EPICTETUS: alis integerrimis nigris: difco flavo, anticis macula fufca: lunula flava, poficis fubtus flavis immaculatis. Fab. Ent. Syft. T. 3. p. 1. p. 330 fp. 252.—UNFIGURED.

# PAPILIO CHEMNIS.

### SPECIFIC CHARACTER.

Somewhat tailed; brown, with transparent spots, posterior margin yellow.

Hesperia Chemnis: alis fubcaudatis fufcis hyalino maculatis margineque postico flavo.

Fab. Ent. Syst. T. 3. p. 1. p. 331, fp. 257.—UNFIGURED.



· Papilio Augias. - Papilio Origines: "Plutargus. Epictetus.

Landon Published arche Act directs to E. Dancon, Oct Sular.



Lapdio Chemnis. Papilio Thrax :: \*\* Mithridates Thrasibulus.\*\*

London Published as the Act directs by E Donovan May 23812

## PLEBEII URBICOLÆ.

## PAPILIO THRAX.

### SPECIFIC CHARACTER.

Wings brown, with a few transparent spots, posterior pair somewhat lengthened in the anal angle.

Antennæ hooked at the extremity.

HESPERIA THRAX: alis ecaudatis fuscis: maculis aliquot fenestratis, antennis uncinatis.

Linn. Suft. Nat. 2, 794, 260.

Fal. Ent. Syft. T. 3. p. 1. p. 337. Sp. 292.

Cramer has figured three varieties of Papilio Thrax as diffinet species, under the names of Salus, Sebaldus, and Ramasis; it may be proper therefore to observe that our specimen corresponds with that in the Linnæan cabinet.

## PAPILIO MITHRIDATES.

## SPECIFIC CHARACTER.

Wings rotund, disk black, spotted with purple; a deep purple band with a central streak of pale lunar marks.

HESPERIA MITHRIDATES: alis rotundatis atris: macula fafciaque poftica purpureis; lunulis pallidioribus.

Fab. Ent. Syft. T. 3. p. 1. p. 336. Sp. 278.—UNFIGURED.

# PAPILIO TRASIBULUS.

#### SPECIFIC CHARACTER.

Wings entire; above black, with numerous blue lunar marks; beneath paler: fpace of the anal angle flesh-colour, with brown spots.

HESPERIA THRASIEULUS: alis integerrimis atris: lunulis cœruleis, poficis fubtus angulo ani cinereo fuſco punctato. Fab. Ent. Syft. T. 3. p. 1. p. 346. Sp. 315.—UNFIGURED.

# PAPILIO JOVIANUS.

#### SPECIFIC CHARACTER.

Wings black, difk of the pofterior pair blue, radiated with feveral oblong white fpots near the bafe.

Hesperia Jovianus: alis concoloribus atris: pofficis cœruleo alboque radiatis.

Fab. Ent. Suft. T. 3, p. 1, p. 348, Sp. 324,—UNFIGURED.

# PLEBEII URBICOLÆ.

# PAPILIO SALVIANUS.

### SPECIFIC CHARACTER.

Wings entire; above brown fpotted with green; beneath, pofferior pair white, with a marginal fireak of brown fpots.

HESPERIA SALVIANUS: alis integerrimis fufcis viridi maculatis: poficis fubtus albis; firiga marginali punctorum fufcorum. Fab. Ent. Syft. T. 3. p. 1. p. 348. Sp. 325.—UNFIGURED.

# PAPILIO GALENUS.

#### SPECIFIC CHARACTER.

Wings entire, uniformly brown with yellow fpots; beneath nearly as above.

Hesperia Galenus: alis integerrimis concoloribus fuſcis flavo maculatis.

Fab. Ent. Syft. T. 3. p. 1. p. 350. Sp. 332.—UNFIGURED.

# PAPILIO CATULLUS.

## SPECIFIC CHARACTER.

Wings entire, uniformly black, with a marginal fireak of white points: a few fimilar white points in the centre of the auterior pair also.

HESPERIA CATULLUS: alis rotundatis integerrimis atris: anticis albo punctatis, posticis striga punctorum alborum. Fab. Ent. Syst. T. 3. p. 1. p. 348. Sp. 323.—UNFIGURED.

# PAPILIO SPIO.

### SPECIFIC CHARACTER.

Wings entire, reversed, blackiff with many white spots.

Hesperia Spio: alis integerimis reverss nigricantibus undique albo maculatis.

Linn. Syst. Nat. 2, 796, 271.

 $Muf.\ Lud.\ Ulr.\ 330.$ 

Fab. Ent. Syft. T. 3. p. 1. p. 354. Sp. 348.—UNFIGURED.

Papilio Jovianus, Salvianus, Galenus, Catullus, and Spio, are figured on the

\*Clerodendrum Infortunatum,\*

A plant recently introduced from the Eaft Indies.



Papīlio Jovanus: "Salvianus Galenus; \*Catullus Apio \*\*

Condon Published me the stee derects by E. Danevan Dec "as the



\*Phalwna figura. Phalwna fitrigatu.\* \*Dhalwna hieroglyphica.

London, Published as the Act direct by Ellonovan April 1,2804.



\* Papilio Ennius. Papilio Polybius.\* \*\*Papilio Zelucus.

Landon Published as the dee directs by E. Donovan. May 1 1803

# PHALÆNA MINEUS.

#### GENERIC CHARACTER.

Antennæ gradually tapering from the base: tongue spiral: wings in general deslected when at rest. Fly by night.

#### SPECIFIC CHARACTER.

Cyaneous: wings orange, with blue fpots.

Bombyx Mineus: cyanea alis concoloribus aurantiis maculis cyaneis.

Cramer has given the figure of a fmall specimen of this sine Phalæna under the trivial name of Mineus. This is evidently of the male; the antennæ of which are not however very correctly expressed. Both sexes of this rare insect are represented in the annexed plate, the drawings of which were taken from specimens met with in Bengal by Mr. Fichtel of Vienna. The originals are at this time in the cabinet of the Emperor of Germany.

# PHALÆNA SCALARIS.

#### SPECIFIC CHARACTER.

Snowy white, with numerous abbreviated black ftreaks, and a longitudinal fulvous ftria.

Cossus Scalaris: nivens strigis numerosis abbreviatis nigris striaque longitudinali sulva. Fal. Ent. Syst.

T. 3. p. 2. p. 5. Sp. 5.—UNFIGURED.

HEPIALUS SCALARIS. Mant. Inf. 2. 135. 7.

Described by Fabricius, from a specimen in the cabinet of Mr. Monson, as a native of China. The specimen represented in the annexed plate was brought from Bengal, and is as well as the preceding at this time in the cabinet of the Emperor of Germany.

# PHALÆNA SANGUINOLENTA.

### SPECIFIC CHARACTER.

Wings incumbent fnowy, coffal edge of the anterior pair fanguineous: pofterior pair fpotted with black.

Boneyx Sanguinolenta: alis incumbentibus niveis: anticis coffa fanguinea, pofficis maculis atris.

Fab. Ent. Syft. T. 3. p. 1. p. 473. Sp. 206.

This infect is rare: our specimen was received from Bombay.

## PHALÆNA FIGURA.

#### SPECIFIC CHARACTER.

Anterior wings whitifi, with brown and black fpots; in the middle a black character refembling figure 7: posterior wings cincreous.

BOMBYX FIGURA: alis anticis albidis fusco nigroque maculatis: medio figura 7 nigro notatis, posticis cinereis.

A nondefeript species in our possession; from Madras.

## PHALÆNA STRIGATA.

#### SPECIFIC CHARACTER.

Anterior wings brown, with a longitudinal green daub: posterior pair yellowish, with a lunar spot, and border of black.

Noctua Strigata: lævis alis anticis fufcis; litura longitudinali viridi, pofticis luteis: lunula limboque nigris.

This moth agrees entirely with the *Noctua Diofcorece* of Fabricius, *Ent. Syft. T. 3. p. 2. p. 16. n. 26.* except in having a large green fletak on the upper wings. It appears, indeed, to have been hitherto confounded with that species, either as a sexual difference, or variety; but we are persuaded it is neither. Both fexes of N. Dioscoreæ in particular, have occurred to our observation, without this streak.—Found in Bengal.

## PHALÆNA HIEROGLYPHICA.

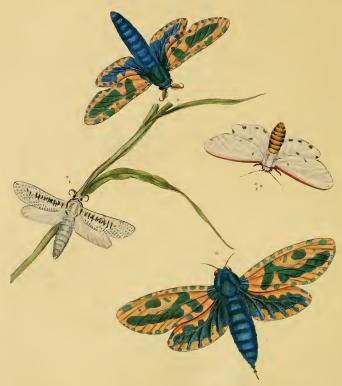
#### SPECIFIC CHARACTER.

Wings broad, dentated, black: on the first pair an abbreviated band, and fomewhat occilated spot: two notches in the margin of the posterior ones.

Noctua Hieroglyfhica: alis patulis dentatis atris: anticis fafcia abbreviata alba maculaque fubocellari; poficis biemarginatis, Fab. Ent. Syft. T. 3. p. 2. p. 11. Sp. 10.

Common in the East Indies.

# LEPIDOPTERA.



\* Phalàna Mineus. Phalana fealaris.; Phakena pangunetenia :

1. 12 11 1 6 61 61 11 A 1 A 1 A 1 A 1



\* Papilio Orcus. - Papilio Busiris. \*; \*\* Papilio Celsus.

landen Publish II. as the Act access to E. Donovan Mar 1 1800



## PLEBEII URBICOLE.

## PAPILIO ENNIUS.

### SPECIFIC CHARACTER.

Wings brown, anterior pair with transparent spots: posterior pair black above with a yellow disk, beneath brown with a white disk.

HESPERIA ENNIUS: alis fuícis: anticis hyalino maculatis, poficis fupra atris: difco flavo, fubtus fuícis: difco albo. Fab. Ent. Syft. T. 3. p. 1. p. 337. Sp. 283.—UNFIGURED.

### PAPILIO POLYBIUS.

### SPECIFIC CHARACTER.

Wings without tails, and black: on the first pair a fulvous spot; second pair yellow at the anal angle.

HESPERIA POLYBIUS: alis ecaudatis atris: anticis macula fulva, posticis angulo ani flavo. Fab. Ent. Syft.

T. 3. p. 1. p. 337. Sp. 281.—UNFIGURED.

# PAPILIO ZELEUCUS.

#### SPECIFIC CHARACTER.

Wings entire, above and beneath black: margin of the lower ones white; head and tail fanguineous.

HESPERIA ZELEUCUS: alis integris concoloribus atris: pofficis margine albo, capite caudaque fanguineis.

Fab. Ent. Syft. T. 3. p. 1. p. 346. Sp. 317.—UNFIGURED.

The three preceding Butterflies are represented on a sprig of the LAGERSTREMIA INDICA, or INDIAN LAGERSTREMIA.

E

## PLEBEII URBICOLÆ.

## PAPILIO ORCUS.

### SPECIFIC CHARACTER.

Wings rotundated, brown: anterior ones fpotted with yellow: pofterior pair beneath blueish.

HESPERIA ORGUS: alls rotundatis fuscis: anticis flavo maculatis, posticis subtus cærulescentibus Fak.

Ent. Syst. T. 3. p. 1. p. 341. Sp. 296.—UNFIGURED.

## PAPILIO BUSIRIS.

### SPECIFIC CHARACTER.

Wings oblong, entire, brown: two large spots, and dots of yellow on the anterior pair; disk of the posterior ones yellow.

HESPERIA BUSIRIS: alis oblongis integerrimis atris: anticis maculis punctifque duobus flavis, posticis disco flavo. Fab. Ent. Syst. T. 3. p. 1. p. 345. Sp. 310.

### PAPILIO CELSUS.

### SPECIFIC CHARACTER.

Wings entire, above and beneath dark brown, with a yellow band on the anterior ones.

Hesperia Celsus: alis integerrimis concoloribus atris: anticis faícia flava. Fab. Ent. Syft. T. 3. p. 1. p. 347. Sp. 316.—UNFIGURED.

## NEUROPTERA.





Myrmeleon Pardalis. \*Myrmeleon punctatum.

### NEUROPTERA.

### MYRMELEON PARDALIS.

#### PANTHER MYRMELEON.

#### GENERIC CHARACTER.

Mouth armed with jaws, two teeth and four long palpi. Tail of the male furnished with forceps or two
ftraight filaments. Antennæ club-shaped, length of the thorax. Wings deflected.

### SPECIFIC CHARACTER.

Wings whitish sprinkled with black. Thighs yellow.

MYRMELEON PARDALIS: alis albis: punctis nigris íparíis, femoribus flavis.

Fab. Ent. Syft. T. 2. p. 92. fp. 2.—UNFIGURED.

Few fpecies of the Myrmeleon genus have been difcovered. Linnæus deferibes only five, and thoir are chiefly natives of Europe. Fabricius adds feven more, befides three others in the genera Afcalabhia, in the Entomologia Syflematica, and particularly two from India, in the cabinet of Sir Joseph Banks, Bart. M. Pardalis and M. Puncitatum; these are the only Indian Myrmeleons hitherto afcertained; to the Entomologist they are equally interesting as new and unfigured species, but M. Pardalis is much superior in beauty to the other. The characteristic distinction of M Punctatum is the alternate black and white specks, or interrupted dashes in the reticulations of the wings. M. Pardalis is reticulated also with delicate brownish nerves, and its general colour a fine yellow, elegantly barred with transverse stream.—From the coast of Coromandel.

The Natural History of the Myrmeleon-larva is curious, and has been traced in fome of the European kinds by Reaum. Roefel, and others, particularly in the M. Formica-Leo of Geoffroy; this creature, among other peculiarities, is furnished in the front with a large pair of forceps, with which it takes its prey. It forms circular cavities in the fand, and concealing itself in the center with only the forceps above the furface catches the weaker or unwary infects that come within the verge of its cell.

## NEUROPTERA.

# MYRMELEON PUNCTATUM.

PUNCTATED MYRMELEON.

### SPECIFIC CHARACTER.

Wings transparent, nerves alternately punctured with black and white.

Myrmeleon Punctatum: alis hyalinus: nervis punctis albis nigrifque alternis.

Fab. Ent. Syft. T. 2. p. 94. fp. 7.—UNFIGURED.

An East Indian species, in the cabinet of Sir Joseph Banks, Bart.



· Chryfis - fasciata. · Chryfis sculatā. · Chryfis .splendida. ·:

London Published as the Act directs by a Donovan March i they

### HYMENOPTERA

## CHRYSIS FASCIATA.

#### GENERIC CHARACTER.

Mouth horny, projecting. Jaws much longer than the lip, linear, membranaecous, and emarginate at the tip. No tongue. Palpi four, advanced unequal, filiform. Antennæ fhort and filiform, confifting of twelve joints, the first of which is longest. Body shining like gold, and gloffy. Abdomen arched beneath, with a scale on each side. Tail most commonly dentated. Sting somewhat exserted. Wings slat.

### SPECIFIC CHARACTER.

Thorax green, with a blue band: anterior part of the abdomen blue fasciated with violet, golden in the middle, posterior end red, with four teeth.

Chrysis Fasciata: thorace viridi faicia cyanea abdomine antice cyaneo-violaceoque fafciato; medio aureo, poftice rubro quadridentato,—UNFIGURED,

This charming infect is from Tranquebar, where we have every reason to believe it to be uncommonly rare. The species does not appear to be described by any author, the only specimen we are acquainted with, is in the cabinet of the Right Hon. Sir J. Banks, Bart.

## CHRYSIS SPLENDIDA.

SPECIFIC CHARACTER.

Shining blue, with four teeth at the tail.

CHRYSIS SPLENDIDA: cœrulea nitida, ano quadridentato. Fab. Spec. Inf. p. 454. Sp. 1.—UNFIGURED.

#### HYMENOPTERA.

Very fearce. This is a native of Tranquebar, where it was discovered by Dr. Koenig. Fabricius describes this insect from a specimen in the cabinet of Sir Joseph Banks, Bart.—A variety of the same species is found in New Holland.

## CHRYSIS OCULATA.

#### SPECIFIC CHARACTER.

Shining green: an occilated golden fpot on each fide of the abdomen: tail blue, armed with fix teeth.

Chrysis Oculata: viridis nitens, abdomine utrinque macula ocellari aurea, ano fexdentato cœruleo.

Fab. Ent. Inf. p. 455. Sp. 4.—UNFIGURED.

Chryfis oculata is diftinguished for the peculiar brilliancy of its colours. This, as well as the foregoing fpecies, was found by Dr. Koenig at Tranquebar. Fabricius deferibes this insect from a specimen in the collection of Sir Joseph Banks, Bart.; from whence our figure is also taken. We have since received the same kind from Bengal through the medium of Mr. Fichtel of Vienna.

## HAMENOPPERA.













Macensis topida ? Pro in viciacea :

- Pospa cineta. - \*\* petiolata arcuata.

### HEMIPTERA.

### VESPA CINCTA.

#### GENERIC CHARACTER.

Mouth horny: jaws compreffed: palpi four, unequal, filiform. Antennæ filiform: first joint longest and cylindrical. Eyes lunar. Body glossy. Sting concealed. Upper wings folded in both sexes.

#### SPECIFIC CHARACTER.

Black, thorax obscurely spotted; body black, with a ferruginous band.

Vesea Cincta: nigra thorace obscure maculato, abdomine atro: fascia ferruginea. Fabr. Ent. Syst. T. 2.

p. 253 · fp. 1.

SPHEX TROPICA. Sulz. Hift. Inf. tab. 27. fig. 5.

From Tranquebar.

## VESPA PETIOLATA.

### SPECIFIC CHARACTER.

Ferrnginous and yellow varied; abdominal petiole incurved and ferrnginous, with a black band.

Vespa Petiolata: ferrugineo flavoque varia abdominis petiolo incurvo ferrugineo: fafcia atra. Fab. Ent. Syft. T. 2. p. 278. 87.

This, with the foregoing species, is remarkably common in many parts of the East Indies. Fabricius speaks of it as a native of Malabar.

## VESPA ARCUATA.

### SPECIFIC CHARACTER.

Black, variegated with yellow; petiole of the abdomen incurved, with four yellow fpots.

Vespa Arcuata: nigra flavo variegata abdominis petiolo incurvo: maculis quatnor flavis. Fab. Ent. Syst. T. 2. p. 276. Sp. 83.—UNFIGURED.

Described by Fabricius as a native of New Holland; we have received it Madras.

### HYMENOPTERA.

## VESPA MACAENSIS.

#### SPECIFIC CHARACTER.

Yellow: thorax black with yellow lines: abdomen marked with undulated black ftreaks,

Vespa Macaensis: flava thorace lineis abdomine fafciis undulatis nigris. Fab. Ent. Syft. T. 2. p. 259. Sp. 22.

Rare. The specimen from which our figure is copied is in the cabinet of the Right Hon. Sir J. Banks, Bart. From Macao.

### VESPA TEPIDA.

#### SPECIFIC CHARACTER.

Black; anterior lobe of the thorax, two dots, and tip of the abdomen ferruginous.

Vespa Tepida: nigra thorace lobo antico punctifque duodus abdomineque apice ferrogineis. Fab. Ent. Syst. T. 2. p. 262. Sp. 31.—UNFIGURED.

# APIS VIOLACEA.

### GENERIC CHARACTER.

Mouth horny; jaw and lip membranaceous at the apex; tongue inflected: palpi four, unequal, and filiform; antennæ filiform and fhort: wings flat; fling of the females and neuters acute, and concealed.

### SPECIFIC CHARACTER.

Hirfute, black, wings violaceous.

APIS VIOLACEA: hirfuta atra alis violaceis. Linn. Syft. Nat. 2. 959. 38?

This infect is described by writers as a native of the South of Europe. We have the same species from the East Indies.

DIPTERA.









Diopsis Ichneumana (

### DIPTERA.

### DIOPSIS ICHNEUMONEA.

#### GENERIC CHARACTER.

Horns on the head two, filiform, without joints, much longer than the head, with the eyes at the tips.

### SPECIFIC CHARACTER.

Black; head, anterior part of the abdomen, and legs ferruginous: two fpines on the posterior extremity of the thorax.

DIOPSIS ICHNEUMONEA: nigra capite abdomine antice pedibusque ferrugineis, thorace posice bispinoso.

The appearance of this curious infect is peculiarly firiking. Nothing can be more fingular than the difpointion of the eyes, which are fituated at the extremity of two long immoveable pedicles arifing from the head, most exactly in that part which in other infects bears the antennæ. In this particular the Diopsis differs not only from other infects of the kindred genera, but also from all the other kinds we are acquainted with. Some sew of the Cancri, &c. have indeed the eyes placed at the extremity of elongated pedicles, as is for example instanced in the Cancer angulatus, yet these are obvious dissimilar in construction, for they are moveable at the base, and may be directed towards any object at the will of the animal with the utmost facility; but to accomplish this, the motion of the pedicle in the Diopsis must be necessarily accompanied by that of the head, or even of the whole body. The eyes of the latter are notwithshading so conveniently stationed at the globular extremity of the pedicles, as to embrace a far more comprehensive range of fight than is usual with the generality of infects.

To the inexperienced entomologist, the Diopsis would rather seem to be furnished with remarkable borns, and be destitute of eyes, although the latter are so very confpicuous when they are pointed out; it is on the contrary the true horns or antennæ that are so minute as to be most likely to escape attention, for each of these confists only of a single setaceous hair, or bristle seated on a very small tubercle just beneath the eve.

It has been previously intimated, in the description of the Pausus denticornis, that the first account of the Diopsis was inferted in a small tract published by Linnæus at Upfal, in 1775. From this we learn, that both the Diopsis and the Pausus were found by Andreas Dahl among a parcel of infects in the possession of Dr. Fothergill, of London, by whom they were sent to Linnæus. These consisted chiefly of infects

#### DIPTERA.

collected in North America and Guinea, but the habitat either of the Paufus, or the Diopfis in particular, it is very certain was by no means exactly known. Fuelly notwithflanding deferibes the latter upon that ambiguous authority, only as a native of Cayenne, and after him Gmelim notes the fame infect from South America, and Guinea perhaps with as little reason. Latreille tells us it is from the coaff of Angola, on the information of Perrin, a zealous naturalist of Bordeaux. Our own specimens (and they are most affuredly the Diopfis Ichneumonea of Linnæus) were brought from Bengal, where it was discovered by Mr. Fichtel, who has thus established the habitat of this fingular creature beyond dispute.

Linnæus, to whom only this individual species of Diopsis was known, as usual with him under such circumstances, does not assign to it any specific character. We are acquainted with another species of this genus, a native of Africa, in the collection of T. Marsham, Esq. which will render our deviation from his example excusable, although the latter is at present undescribed.

# INDEX

ACCORDING TO THE

## SYSTEMA NATURÆ OF LINNÆUS.

19,

25,

31,

37,

43.

49.

CIMEX.

	Pl. 14.
SCARABÆUS.	nigripes
Pl. 1, 2.	papillofus
Atlas	cruciatus
fpinfex	mactans
Miliaris	uniguttatus
Koenigii	viridis
Cetonia histrio	ferratus
cærulea	
Cardica	
BUPRESTIS.	LEPIDOPTERA.
Pl. 3.	LEFIDOFIERA.
fternicornis	
Chryfis	PAPILIO.
Ænea	Pl. 15, 16, 17, 18, 19
4-maculata	20 91 99 99 94 95
4-maculata	20, 21, 22, 23, 24, 25 26, 27, 28, 29, 30, 31
CARABUS.	32, 33, 34, 35, 36, 37
Pl. 4.	32, 33, 34, 33, 30, 37
6-maculatus	31, 39, 40, 41, 42, 43
	44, 45, 46, 47, 48, 49
2-maculatus	50, 51, 52.
Pausus.	Antenor
	Antiphus
Pl. 5.	Priamus
denticornis	Panthous
thoracicus	Heliacon
Fichtelii	Idæus
pilicornis	Astyanax
C	Polymnestor
CURCULIO.	Diephobus
Pl. 6.	Lacedemon
Regalis	Empedocles
Palmarum	Ulyffes
THE MANDER A	Evalthe
HEMIPTERA.	Lethe
	Cocles
Fulgora.	Tiridates
Pl. 7, 8.	Idea
Pyrorhynchus	Hippia
hyalinata	Affinis
festiva	Philomela
lineata	Leucippe
pallida	Danæ
	Mærula
CICADA.	Judith
Indica	Libythea
	Eucharis
MANTIS.	
Pl. 9, 10, 11.	Genutia
gigas	Amaryllis
viridis	Caftalia
ficcifolia	Scylla
~	Cacta
GRYLLUS.	Octavius
Pl. 12.	Pyrrhus
reticulatus	Menetho
punctatus	Arcefilaus
monftrofus	Blandina
. —	Liberia

LOCUSTA.

Pl. 13.

citritolia

Amboinenfis

Phegea

Fatima

Thyelia

Nero

COLEOPTERA.

Ifis Phorevs Eribotes Ifidore Cydippe Dirce Eurinome Hippona Cyane Cœnobita Cocalia Sophia Auge Baldus Periander Allica Obrinus Liria Crantor Pann Pindarus Vulcanus Chiton Herodotus Pythagoras Florus Lisias Sophocles Jarbas Thales Melibœus Tyrtæus Xenophon Achæus Phorbas Strephon Æolus Pericles Philippus Thucydides Petronius Regulus Lucanus Tarquinus Æmulius Numitor Plinius Plato Hippocrates Theocritus Parrhafins Bibulus Hylax Cœnus Livius Romulus Ptolemæus Ovidius Curius Propertius Tibullus

Gnidia Hiarba

Augias Origines Plutargus **Epi&etus** Chemnis Thrax Mithridates Thrafibulus Jovianus Salvianus Galenus Catullus Spio Eunius Polybins Zeleucus Orcus Bufiris Celfus PHALÆNA. Pl. 53, 54. Mineus fcalarıs fanguinolenta figura ftrigata hieroglyphica Pardalis

# NEUROPTERA.

MYRMELEON. Pl. 55. punctatum

## HYMENOPTERA

CHRYSIS. Pl. 56. fasciata fplendida oculata VESPA.

Pl. 57. cincta. petiolata arcuata Macænsis tepida

APIS. violacea

## DIPTERA.

Diopsis. Pl. 58. Ichneumonea

# INDEX

ACCORDING TO THE

# ENTOMOLOGIA SYSTEMATICA OF FABRICIUS.

CLASS 1. ELEUTERATA.	Curius	
Genus 2. Scaralæus.	Lacedemon	
Atlas		Genus 18
fpinifex	***Fefiva.	* F
Miliaris	Evalthe	I
Koenigii	Eurinome Philomela	I
Genus 76. Cetonia.		1
Histrio	Hippia affinis	(
Cærulea		I
Genus 19. Carabus.	**** Nymphales.	1
2-maculatus	Pyrrhus	ļ
6-maculatus. Genus 78. Bupreftis.	Tiridates	
fternicornis	Cocles	2
Chryfis	Periander	,
Ænea	Empedocles	
4-maculata	Octavius	1
Genus 61. Cerocoma.	Ifis	
(Paufus Linn.	Eribotes	1
& Fabr. Sys-	Ifidore	î
tema Eleute-	Phoreys	
ratorum.)	Lethe	
denticornis	Fatima	i
thoracicus	Menetho	Ī
Fichtelii	Cydippe	I
pilicornis	Cyane	
Genus 102. Curculio.	Cacta Dirce	I
Regalis	Hiarba	
Palmarum	Blandina	7
	Phegea	
CLASS 2, ULONATA.	Gnidia	I
Genus 120. Mantis.	Thyelia	I
(Phasma Ent.	Liberia	]
Syst. Supp.)	Arcefilaus	
gigas	Hippona	
viridis	Nero	;
ficcifolia	Obrinus	1
Genus 124. Locusta.	Crantor	1
Amboinenfis		
citrifolia	******Parnassii.	, ;
Genus 125. Gryllus.	Idea	1
reticulatus	******Danai.	
punctatus monstrofus	Amaryllis	
montrojus	Caftalia	1
ORDER 9. GLOSSATA.	Scylla	**I
Genus 186. Papilio.	Leucippe	1
*Equites Trojani.	Danæ	
Antenor	Mærula	
Antiphus	Judith	
Priamus	Libythea	
Panthous	Eucharis	
Heliacon	Genutia	
Idæus	*********	
Aftyanax	****** Satyri.	

Baldus

Liria

Allica

Auge

Cœnobita

Sophia
Cocalia
us 187. Hesperia
*Rurales.
Pann
Pindarus
Vulcanus
Chiton
Herodotus
Pythagoras
Firms
Florus
Lifias
Sophocles
Jarbas
Thales
Melibœus
Tyrtæus
Xenophon
Achæus
Phorbas
Strephon
Æolus
Pericles
Philippus
Thucydides
Petronius
Regulus
Lucanus
Tarquinus
Æmulius
Numitor
Plinius
Distri
Plato
Hippocrates
Theocritus
Parrhafius
Bibulus
Hylax
Cœnus
Livius
Romulus
Ptolemæus
Ovidius
Ovidius
**Urbicolæ.
Propertius
Tibullus
Augias
Origines
Plutargus
Epictetus
Chemnis
Thrax
Mithridates
Thrafibulus
Luranoulus

Jovianus

Salvianus

Galenus

Catullus

Sophia
Cocalia
87. Hesperia.
Rurales.
Pann
Pindarus
Vulcanus
Chiton
Herodotus
Pythagoras
Florus
Lifias
Sophocles Jarbas
Thales
Melibœus
Tyrtæus
Xenophon
Achæus
Phorbas
Strephon
Æolus
Pericles
Philippus
Thucydides
Petronius
Regulus
Lucanus
Tarquinus
Æmulius Numitor
Numitor
Plinius Plato
Hippocrates Theocritus
Parrhafius
Bibulus
Hylax
Cœnus
Livius
Romulus
Ptolemæus
Ovidius
T1 1' 1
Urbicolæ.
Propertius Tibullus
Augias
Origines
Plutargus
T 10

Spio Ennius Polybius Zeleucus Orcus Bufiris Celfus

Genus 191. Bombyx. fanguinolenta figura

Genus 192. Coffus. Mineus **f**calaris

Genus 104. Noctua. ftrigata hieroglyphica

ORDER SYNISTATA. Genus 133. Myrmeleon. pardalis punctatum

ORDER PIEZATA. Genus 147. Chrysis. fplendida oculata

Genus 151. Vefpa. cincla petiolata arcuata Macenfis

tepida Genus 158. Apis. violacea

ORDER RYNGOTA. Genus 201. Fulgora. Pyrorhynchus Hyalinata festiva

lineata pallida Genus 204. Cicada. Indica

Genus 213. Cimex. nigripes Papillofus cruciatus mactans uniguttatus viridis ferratus

> ORDER ANTLIATA. Diopsis. Ichneumonea

Polymnestor

Deiphobus

\*\* Equites Achivi.

Ulyffes

#### ERRATA.

Part of the letter prefs contained in the fourteenth number of this work having been inadvertently put to prefs before the author received the corrected fheets, it has been found necellary to reprint the Linnean and Fabrician Indexes, and at the fame time to requeft the indulgence of the reader for the following incorrections that appear in other parts of the work.

"Index according to the Systematica Nature" to be cancelled, that referring to the Systema Nature being intended to supply its place.

Pausus Denticoanis, fixth line from the bottom of the page, for Sphæroides (Pausus) read Sphærocerus

PAUSUS THORACICUS, fourth line, for teftaceis read teftaceus; and for bipartite read bipartito, after which infert a comma.

CIMEX UNIGUTTATUS fourth line, for ferrugineis read ferrugineus.

Among the Plebeii Urbicolæ dele description of Hesperia (Papilio) Salustius, a small insect of which no figure is given.

Running title on the defeription of Papilio Panthous, and Papilio Idæus, for Hemiptera read Lepidoptera.