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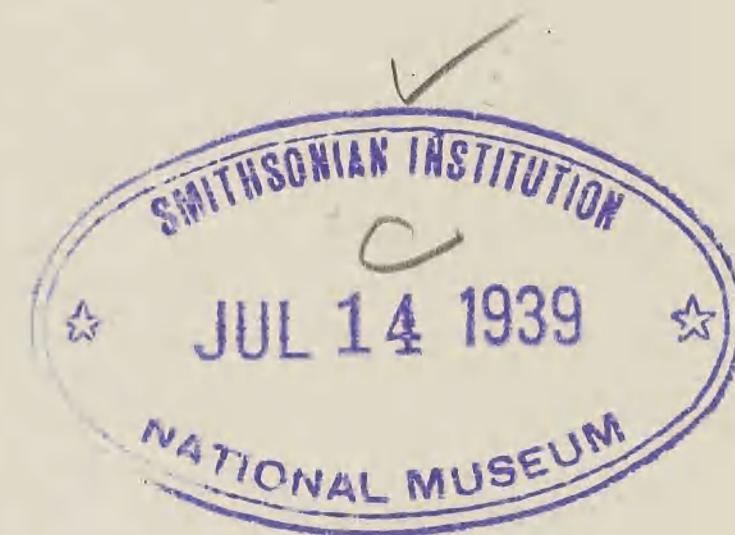
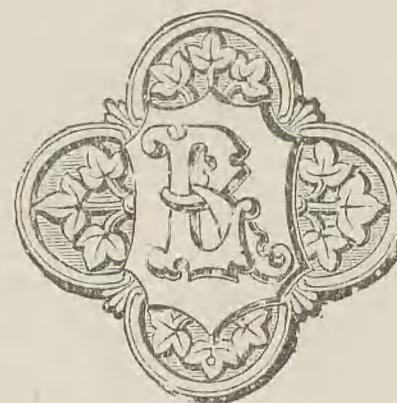
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BY

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two upper medians from extreme end of the cell; submedian and internal vein curved. *Body* rather slender; palpi ascending, slender, compressed; antennæ with a moderately thick club; eyes coarsely hairy.

Type.—D. Samio.

DEBIS KANSA (Plate 78, fig. 1, 1a, b, ♂ ♀).

Debis Kansa, Moore, Catal. Lep. Mus. E. I. Company, i. p. 220 (1857).

Letha Kansa, Butler, Catal. Satyr. Brit. Mus. p. 119 (1868). Marshall and de Nicéville, Butt. of India, etc. i. p. 145 (1883). Elwes, Trans. Ent. Soc. Lond. 1888, p. 308. Staudinger, Exot. Schmett. p. 221, pl. 78, ♂.

IMAGO.—Male. Upperside olivescent ochreous-brown. *Forewing* with a distinctly visible broad, dusky transverse *discal fascia* clothed with glandular scales, these scales being short, more or less broad, ribbed, and having dentated tips, with numerous interspersed narrow truncate-base bulbous androconia having short hair-like end and penicillate tip, and interspersing moderately long fine hairs; beyond which is a very indistinctly-defined small pale apical spot and two similar lower subapical spots. *Hindwing* with an outer series of five black spots, each with a narrow ochreous-yellow outer ring, the third and lower fifth spot being small, the ordinary sixth or anal spot not present; marginal lines pale bordered. Underside paler, and of a uniform vinaceous tint, slightly washed with lilacine chalybeate-white; crossed by a slender dark purple-red subbasal and a discal line, the latter on the hindwing slightly irregular; marginal lines pale bordered. *Forewing* with four pale ochreous-brown ocelli. *Hindwing* with six small-sized ocelli, each with a lilacine outer ring; the marginal line inwardly bordered with lilacine and ending in a prominent triangular anal spot.

Female. Upperside slightly paler. *Forewing* with a distinct transverse discal dusky sinuous line externally bordered by two or three sinuous pale ochreous decreasing spots from its anterior end; beyond is a small pale ochreous subapical spot and two lower spots. *Hindwing* as in the male. Underside paler than in the male; markings the same, except that the forewing has six palely-defined small ocelli. *Body* and legs beneath, and sides of the palpi brownish-ochreous.

Expanse, ♂ $2\frac{3}{4}$ to 3, ♀ $2\frac{6}{8}$ inches.

HABITAT.—Sikkim; Sibsagur, Manipur; Upper Tenasserim.

DISTRIBUTION.—“A fairly common species in Sikkim at 2000 to 4000 feet, and also taken up to 9000 feet between April and October.” (Elwes, Tr. Ent. Soc. 1888, 312.) Messrs. Otto Möller and L. de Nicéville have taken both sexes of this species in the Sikkim Hills at low elevations in October. It was also taken at Darjiling by the late Mr. W. S. Atkinson. Mr. A. O. Hume took it in the eastern hills of Manipur in May, and Capt. C. T. Bingham obtained it in the Thoungyeen forests, Upper Tenasserim, in March (De Nicéville, Butt. India, 145).

DEBIS SAMIO (Plate 78, fig. 2, 2a, ♂ ♀).

Debis Samio, Doubleday and Hewitson, Gen. D. Lep. pl. 61, fig. 3 (1849), ♂. Westwood, *id.* p. 360 (1851), ♂.

Lethe Samio, Butler, Catal. Satyr. Brit. Mus. p. 118 (1868). Marshall and de Nicéville, Butt. of India, etc. i. p. 145 (1883), ♂.

Debis Purana, Felder, Wien. Ent. Monat. iii. p. 401 (1859), ♀.

Lethe Purana, Butler, Catal. Satyr. Brit. Mus. p. 118 (1868). Marshall and de Nicéville, Butt. of India, etc. i. p. 146, ♀.

IMAGO.—Male. Upperside olivescent ochreous-brown. *Forewing* without markings, but crossed by a very indistinctly-defined broad inwardly-oblique discal dusky *fascia* composed of glandular scales. *Hindwing* with six submarginal black spots, of which the upper third and the lowest are minute, the second the largest, and each bordered by a pale reddish-ochreous outer ring, the border of the upper three being broadly confluent. Underside paler and of a reddish tint; both wings with a slender lilacine outer bordered subbasal and a discal transverse red-brown line, the latter, on the hindwing, being incurved anteriorly and much angulated between the upper median and the radial. *Forewing* with four pale ocelli, each with a lilacine outer ring. *Hindwing* with six prominent ocelli, the sixth duplex, each with a lilacine outer ring; a lilacine spot at anal angle.

Female. Upperside paler, more olivescent-ochreous in tint. *Forewing* crossed by an oblique discal decreasing, almost macular, white *fascia*, which is diffused externally; beyond is an adjacent obsolescent white spot between the upper and middle median veinlets. *Hindwing* crossed by a dusky-brown discal line, which is angulated outward just above the upper median veinlet, the angle being darker brown; beyond are four large black submarginal spots broadly circled with ochreous-yellow; marginal line ochreous bordered. Underside paler olivescent ochreous-brown, palest externally; marginal lines ochreous bordered; both wings crossed by a straight subbasal darker brown line with lilacine outer border. *Forewing* also crossed by an oblique similar discal line with broader lilacine outer *fascia*, beyond which are four pale ochreous-bordered small ocelli. *Hindwing* also crossed by an angular discal brown line as in the male; the six ocelli also as in the male, each with an outer lilacine ring; a lilacine triangular anal spot below the lower ocellus.

Expanse, ♂ $2\frac{6}{8}$, ♀ $2\frac{5}{8}$ inches.

HABITAT.—East India.

The only specimens of this species as yet known to us are the male type of *D. Samio* in the British Museum Collection (Plate 78, fig. 2), of which no definite locality is known, other than that of "East India," and the female in Dr. Felder's Collection, described by him as *D. Purana*, but without any given locality. For the

opportunity of being able to determine these two insects as the sexes of one another, we are indebted to Dr. Rogenhofer, the Custodian of the Zoological Museum, Vienna, who has kindly favoured us with a coloured drawing of Dr. Felder's type specimen, and which we reproduce on our Plate No. 78, fig. 2a.

This species is closely allied to *D. Sinorix*, but the male is distinguishable from it, on the upperside, by the forewing not possessing the pale ochreous subapical spots, and by the hindwing having the black spots and their reddish-ochreous border more clearly defined. On the underside, the male of *D. Samio* is of a redder tint throughout; the transverse subbasal and the discal line are both narrower, less narrow than even in *D. Kansa*; on the hindwing the discal line is much outwardly-angulated in its middle, and it is also incurved much closer towards the subbasal line at its upper end than in either *D. Sinorix* or *D. Kansa*. On the forewing beneath, there are only four ocelli present in *D. Samio*. The female (*D. Purana* of Felder) differs from the same sex of *D. Sinorix*, on the upperside, in the forewing having a more defined transverse discal white band, and one—the lower—subapical spot only being present; the markings on the hindwing, however, are similar. On the underside the colour of the female is also paler, and more ochreous in tint; and on the forewing there are only four ocelli present; on the hindwing the discal line is much angulated outwardly in its middle and incurved upwards nearer to the subbasal line than in *D. Sinorix*.

DEBIS SINORIX (Plate 78, fig. 3, 3a, b, ♂ ♀).

Debis Sinorix, Hewitson, Exotic Butt. iii. *Debis* pl. 3, fig. 19, 20 (1863), ♂.

Letha Sinorix, Butler, Catal. Satyr. Brit. Mus. p. 118 (1868). Marshall and de Nicéville, Butt. of India, etc. i. p. 144 (1883). Elwes, Trans. Ent. Soc. Lond. 1888, p. 308.

IMAGO.—Male. Upperside glossy, dark olivescent ochreous-brown. *Forewing* with a slender very indistinct dusky-black transverse subbasal and a discal straight nearly erect line; a subapical series of three pale ochreous yellow small round spots, between the two upper of which is a smaller black spot, and another lower black spot between the middle and lower median veinlets; a slightly-apparent dusky *transverse fascia composed of glandular scales* crossing the wing before the discal line. *Hindwing* with a broad outer discal angular-bordered pale reddish-ochreous fascia, upon which are six black spots, of which the upper third and the lowest are very minute; the extreme outer margin being darker reddish-ochreous. Underside very pale olivescent-brown, the discal area and apex of forewing washed with chalybeate lilacine-white; marginal lines dark purplish-red. *Forewing* with a subbasal and a discal transverse straight dark purple-red thick line, and a dentate inner mark within the cell; beyond which is a series of six small pale spots, the upper being white, the others ocellate, the second, fifth, and sixth with black centre and white pupil, the third and fourth

ochreous-yellow, the sixth being situated between the lower median and submedian. *Hindwing* with a similar subbasal and discal line, the latter very slightly dentate above the upper median, beyond which are six small-sized ocelli, each with a lilacine-white outer ring; marginal lines bordered with lilacine-white ending in a prominent triangular anal spot.

Female. Upperside of both wings paler than in male. *Forewing* with the transverse discal dusky line externally bordered with very indistinct pale yellowish spots; outer marginal spots as in male. *Hindwing* marked as in the male. Underside slightly paler throughout than in male, markings exactly the same. Body and legs beneath, and sides of palpi pale brownish-ochreous.

Expanse, $2\frac{1}{2}$ to $2\frac{3}{4}$ inches.

HABITAT.—Sikkim; Bhotan; Assam; Khasia Hills; Burma.

DISTRIBUTION.—In Sikkim, according to Mr. Elwes (Tr. Ent. Soc. 1888, 312), “this must be a very rare species, as I have only one old specimen from Wilson’s Collection, and Möller has only one, which differs from Bhotan specimens in wanting the rufous margin of the hindwing. It occurs, however, more commonly near Buxa in Bhotan, where Mr. Knyvett’s collectors have taken both sexes in July and August. I have taken it at Cherra Punji in the Khasia Hills, in September.” It was obtained by the late Mr. W. S. Atkinson in Sikkim, and at Cherra Punji. Mr. de Nicéville (Butt. Ind. i. 144) gives Cherra Punji and Sibsagur, Assam, and the Dafla Hills, but no precise record of their capture.” Our own collection contains specimens from the Khasia Hills collected by Major Godwin-Austen. In Burma, Dr. N. Manders (Tr. Ent. Soc. Lond. 1890, 518) records “one male, with rufous markings on the hindwing well marked, from Bernardmyo, a Hill Station in the Shan States at 7000 feet elevation.”

DEBIS MEKARA.

WET-SEASON BROOD (Plate 79, fig. 1, 1a, b, ♂ ♀).

Debis Mekara, Moore, Catal. Lep. Mus. E. I. Compy. i. p. 219 (1857).

Letha Mekara, Butler, Catal. Satyr. Brit. Mus. p. 119 (1868). Moore, P. Z. S. 1878, p. 824. Marshall and de Nicéville, Butt. of India, etc. i. p. 148, pl. xi. fig. 24, ♂ (1883). Distant, Rhop. Malayana, p. 413, pl. 39, fig 9, ♂ (1886). Elwes, Trans. Ent. Soc. Lond. 1888, p. 309.

IMAGO.—Male. Upperside dark glossy olivescent ochreous-brown; cilia pale cinereous-ochreous. *Forewing* with a slightly perceptible broad transverse *discal* *dusky-brown glandular fascia*. *Hindwing* with four round blackish submarginal spots, each encircled by a more or less defined narrow reddish outer ring, some specimens with the upper or apical spot of the underside being also slightly apparent. Underside paler; both wings crossed by a straight dark reddish-brown subbasal line and a similar discal line, the latter being very slightly angulated on the upper median

veinlet in the forewing and also slightly on the medians in the hindwing, both lines also broadly bordered externally with glossy lilacine pinkish-white; marginal lines dark brown, slender. *Forewing* with five, generally six, small uniformly-sized pale ocelli, each with minute black centre and a slightly perceptible white pupil, all encompassed by a lilacine outer ring. *Hindwing* with six more prominent ocelli, the upper and the fourth being rounded, the others more oval and the lowest duplex, each with a dark brown-black centre speckled with white, and with a prominent lilacine outer ring.

Female. Upperside dusky-red, apical half of the forewing, and marginal border of hindwing darker olivescent-brown; marginal lines of hindwing dark brown and interlined with ochreous. *Forewing* with an angulated, macular, white band bordering the transverse discal blackish line, and a small white apical spot, below the latter, in some specimens, are three small incipient pale ocelli. *Hindwing* with a slightly apparent transverse discal blackish angulate line, five large black submarginal spots, and sometimes a less apparent small lower spot, all more or less with a paler red outer ring, or in some their outer border is of a pale ochreous tint. Underside of the same paler colour as in male, the transverse subbasal line on both wings is straight, but the discal line on the forewing is broadly angulated outward on the upper median vein, and its costal end terminates inward nearer the subbasal line; the discal line on the hindwing is also somewhat more angulated than in the male; the discal line on the forewing has a broad lilacine-white macular outer border, and this line on the hindwing is also more or less broadly bordered externally with lilacine-white; ocelli on both wings as in the male, except that on the forewing the ocellus between the middle and upper medians is pushed slightly outward by the white dentate spot. *Body* and legs beneath, and sides of palpi pale brownish-ochreous; antennæ reddish with brown apical band.

Expanse, $2\frac{1}{2}$ to 3 inches.

DRY-SEASON BROOD (Plate 79, fig. 1, c, ♂).

IMAGO.—Male. Upperside as in the wet-season brood. Underside much paler and more uniformly coloured throughout than in the male of the wet-season brood, and more ochreous in tint; the transverse lines very slightly, or not all, bordered externally with glossy lilacine, the lilacine bordering to the ocelli also less, or entirely absent; the ocelli on both wings less defined and smaller, especially those on the hindwing.

Expanse, ♂ $2\frac{5}{8}$ inches.

HABITAT.—Sikkim; Assam; Khasia Hills; Burma; Malayia.

DISTRIBUTION.—According to Mr. Elwes (Trans. Ent. Soc. 1888, 313) this is “a common species in the low valleys and up to 5000 feet, in Sikkim, from March to

November. It frequents bamboos, and when disturbed flies into the thick foliage, where it settles on a bamboo-stem with closed wings, and is difficult to see. Like several of its congeners, it prefers shady to sunny places." Specimens from Shillong, Assam, are in Mr. P. Crowley's collection. Capt. E. Y. Watson, in his "Notes on Chin-Lushai butterflies" (Journ. Bombay Nat. Hist. Sec. 1891, 10), records it "from Tilin, in the Chin Hills, taken in May." Major C. H. E. Adamson (Catal. Butterflies collected in Burma, p. 8) states that it is "sparsely spread throughout Burma from June to August." Mr. O. Limborg (P. Z. S. 1878, 824) obtained it at Ahsown, 2000 feet, and at Tao, 3000 to 5000 feet, in Upper Tenasserim." "Capt. C. T. Bingham took it in the Donat range, Tenasserim, in February and April" (Butt. of India, i. 148). There is a specimen of the male from Mergui, collected by Commander Carpenter, R.N., in the British Museum collection.

DISTRIBUTION OUTSIDE INDIAN AREA.—In the Malay Peninsula Mr. Distant (Rhop. Malay. 414) records it from Perak, and Malacca, where Capt. Godfrey observed it frequenting dark shady places, passing the day at the foot of a tuft of bamboo, or on low shrubs under shady trees, and when disturbed it goes off with a rapid flight, soon settling again, however, unless it has been several times alarmed." A specimen from Salanga Island is in the British Museum. A male in our own collection, from Sumatra, collected by Mr. A. R. Wallace, is undoubtedly Mekara. An example from Sarawak, Borneo, is also in the British Museum collection. This species will also probably include the Javan *D. Manthara* (Felder, Reise Novara, iii. p. 497).

Of our illustrations of this species on Plate 79, figs. 1, 1a, b, represents the male and female of the wet-season brood; and fig. 1, c, the underside of the male of the dry-season brood; all from Sikkim.

DEBIS SATYAVATI (Plate 80, fig. 2, 2a, ♀).

Lethe Satyavati, de Nicéville, Journ. Asiat. Soc. Bengal, 1880, p. 246, ♀. Marshall and de Nicéville, Butt. of India, i. p. 554 (1883), ♀.

IMAGO.—"Female. Upperside dull brown, paler towards the margins. *Forewing* with an indistinct submarginal darker line. *Hindwing* with a submarginal series of four rounded spots darker than the ground-colour, placed one in each interspace above the first median nervule; two marginal darker lines defined inwardly by paler lines than the ground-colour. Underside pale brown, with no ochreous tint, and washed with lilac, especially on the outer half. Both wings crossed by a prominent brown nearly straight subbasal line outwardly margined with lilac. *Forewing* with an irregular discal transverse brown line; a bar in the cell within the subbasal line; five indistinct submarginal ocelli circled with lilac and brown on a lilac ground; and a yellowish marginal line edged on both sides with dusky, within which is a brown waved band on the lilac ground between the ocelli and the margin.

Hindwing with a discal very much angled dark-brown line, within which is a very distinct lilac litura above the third median nervule and just beyond the apex of the cell; the submarginal ocelli large, the upper one distinctly pupilled with white, and all of them profusely speckled with white; the usual marginal markings." Male unknown.

Expanse, $2\frac{7}{10}$ inches.

HABITAT.—Sibsagar, Assam.

The male of this species is unknown. The type specimen, from which the illustrations on our Plate No. 80, fig. 2, 2a, are taken, is in the Indian Museum, Calcutta, and has been kindly lent to us for this purpose, by Prof. J. Wood-Mason.

DEBIS CHANDICA (Plate 79, fig. 2, 2a, b, ♂ ♀).

Debis Chandica, Moore, Catal. Lep. Mus. E. I. Compy. i. p. 219 (1857).

Lethe Chandica, Butler, Catal. Satyr. Brit. Mus. p. 119 (1868).

IMAGO.—Male. Upperside dusky-brown, darkest basally; cilia pale cinereous-ochreous. *Forewing* with the discal transverse *glandular fascia* broad and perceptibly blackish. *Hindwing* with the four, or five, submarginal blackish spots scarcely visible, in some they are more or less apparent, whilst in some Sikkim specimens taken in March, these spots are more or less distinctly red bordered. Underside pale greyish ochreous-brown, more or less purplish tinged; marginal lines prominent and ochreous bordered. Both wings with a dark red-brown angulated subbasal line, and a more irregularly-angulated discal line, the latter line on the forewing being obsolescent anteriorly, and on the hindwing much angularly projected outward on the middle median, both lines on the forewing being pale lilacine bordered externally, and the intermediate area between the lines on the hindwing ochreous towards the costa and increasingly dark brown bordering the outer angles. *Forewing* with six small almost equal-sized pale ocelli, each with a slightly-defined minute blackish centre and a scarcely visible white pupil, and outer lilacine ring. *Hindwing* with six prominent ocelli, each with a black-brown and white-speckled centre, the upper ocellus being the largest and rounded, the second reniform, the others more oval, and all encompassed by a lilacine outer border.

Female. Upperside dusky-red, the apical half of forewing and outer margin of hindwing blackish-brown. *Forewing* with an angular discal white macular band, composed of three portions, beyond which is a submarginal series of six more or less defined small black white-bordered ocellated spots. *Hindwing* with the inner marginal border and the median area blackish-brown; marginal lines prominent and ochreous bordered anteriorly; six submarginal more or less defined large ocellate spots, each with a black centre, pale reddish iris, black outer ring, and all more or less with a pale ochreous border. Underside of the

same ground-colour as in male, the prominent transverse subbasal and discal angulated line, as on upperside, also the same, but the latter line with darker brown interior border, and with a triangular dark-brown portion before the apex on the forewing; marginal lines prominent; ocelli on both wings somewhat larger than in male, and much more prominent. Body beneath, legs, and sides of palpi pale ochreous; antennæ ochreous with brown apical band.

Expanse, $2\frac{1}{2}$ to 3 inches.

HABITAT.—Sikkim; Assam; Khasia Hills; Burma.

DISTRIBUTION.—“Not uncommon in the lower valleys in Sikkim, where Mr. Otto Möller has taken it in May, August, and October. The late Mr. Cock took it at Shillong. It also occurs in the Khasia Hills and Silhet. Mr. A. O. Hume took it in the eastern hills in Manipur in May” (Butt. of India, 149). The late Mr. W. S. Atkinson obtained it in Cherra Punji in October. According to Mr. Elwes (Trans. Ent. Soc. 1888, 314) it is common in Sikkim at the same elevation and in the same months as *D. Mekara*, and has very similar habits.” Major C. H. E. Adamson (List of Burmese Butterflies, p. 8) records it from the Arakan Hills. Dr. N. Manders (Tr. Ent. Soc. 1890, 518) obtained it at Fort Stedman, 3200 feet, in the Shan States during the rainy season.” “Capt. C. T. Bingham took it in the Thoungyeen forests in Upper Tenasserim, in September.” Signor Leonardo Fea obtained it in the Karen Hills in September and October. A specimen of the male labelled “Sumatra,” is in the British Museum.

DEBIS DISTANS (Plate 80, fig. 1, 1a, b, ♂ ♀).

Letha Distans, Butler, Trans. Ent. Soc. Lond. 1870, p. 448, ♂; *id. Lep. Exotica*, p. 87, pl. 33, fig. 4, 6, 7, ♂ ♀ (1872). Marshall and de Nicéville, Butt. of India, etc. i. p. 148 (1883). Elwes, Trans. Ent. Soc. Lond. 1888, pp. 309, 313.

IMAGO.—Male. Upperside olivescent ochreous-brown. Forewing with faint indication of a *dusky transverse discal glandular fascia*. Hindwing with the outer half red, the dividing discal line angulated at the upper median veinlet; a submarginal series of five black spots, of which the three lower are small. Underside pale ochreous-brown, the darker shades more olivescent-brown; marginal lines dark brown; transverse subbasal and discal dark brown line narrow, the former slightly angulated, the latter on the forewing angulated on the upper and middle medians (more acutely than in *D. Chandica*), and on the hindwing acutely angulated on the upper median (but less so than in *D. Chandica*). Forewing with six pale ocelli. Hindwing with six ocelli, each with a black centre and white speckles, these ocelli are of similar shape to but smaller than those of *D. Chandica*.

Female. Upperside ferruginous-red. Forewing with the apical half dusky ferruginous-brown; crossed by an angular discal macular white band, composed of

three portions as in *Chandica*, but the upper portion smaller and narrower, these white spots externally bordering the dark angular discal line; beyond is a white apical spot and some very slight indications of pale lower spots. *Hindwing* with a slightly-defined discal angulated brown line, and five outer pale-ringed black spots, the two upper of which are the largest and obliquely oval in shape; marginal border brownish, marginal lines dark brown. Underside pale olivescent ochreous-brown, the inner borders of the discal line, the triangular costal patch, and the marginal lines dark brown. *Forewing* with a dark brown slightly-angulated subbasal line, and an angular discal white macular band, as on upperside, beyond which are six pale ochreous-brown ocelli, the one between the middle and upper median being pushed outward by the dentate white spot. *Hindwing* with a slightly-angulated subbasal line, and an irregular-angulated discal line, which latter is acutely pointed and extended upon the upper median veinlet; six outer ocelli, the three upper and the lowest with black centre speckled with white, the fourth and fifth paler but similar, all are smaller and narrower than in *Chandica* and more or less reniform in shape, the upper one being somewhat the largest. *Body* beneath, legs, and sides of palpi pale ochreous.

Expanse, ♂ $2\frac{2}{8}$, ♀ $3\frac{1}{8}$ inches.

HABITAT.—Sikkim; Bhotan.

Distinguishable from *D. Chandica* in the male having on the upperside the exterior half of the hindwing red, the underside paler, the discal line on the forewing more acutely angulated on the upper and middle median, but less so on the hindwing, and on the hindwing the ocelli are all smaller, less prominently developed, but similarly shaped. In the female, the upperside is paler and brighter coloured, the macular white angular band composed of somewhat smaller portions, and the black spots on the hindwing more defined. On the underside the ground-colour is similar to that of *Mekara*, but more ochreous in tint than in *Chandica*, the subbasal line on both wings is less regular than in *Mekara* but is also less angulated than in *Chandica*, the white macular-bordered angular discal line on the forewing is more concave posteriorly than in *Mekara*, but less so than in *Chandica*, and on the hindwing the discal line is projected more outward upon the upper median than in *Mekara*, but much less so than in *Chandica*; in *Distans* these two lines on the hindwing are nearer each other than in *Mekara*, and the discal line on this wing is much less incurved at its anterior end than in *Chandica*; the ocelli on the forewing are similar to those in *Mekara*, these, in both species, being smaller than those in *Chandica*; the ocelli on the hindwing are also smaller and more regularly reniform in shape.

It is probable that *distans* may be ultimately proved to be the dry-season form of *Chandica*.

DISTRIBUTION.—There are specimens of both sexes, from Darjiling, in the
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Hewitson Collection at the British Museum, and two females in our own cabinet. Mr. Elwes (Tr. Ent. Soc. 1888, 314) records "a pair taken by Mr. Knyvett at Buxa, in Bhotan."

Of the illustrations of this species on our Plate No. 80, fig. 1 represents the male, and figs. 1, 1a, the type female, described and figured by Mr. Butler in the Lep. Exotica.

DEBIS VINDHYA.

WET-SEASON BROOD (Plate 81, fig. 1, 1a, b, c, ♂, ♀).

Debis Vindhya, Felder, Wien. Ent. Monats, iii. p. 402 (1859), ♂.

Lethe Vindhya, Butler, Catal. Satyr. Brit. Mus. p. 119 (1868). Marshall and de Nicéville, Butt. of India, etc. i. p. 146 (1883). Elwes, Trans. Ent. Soc. Lond. 1888, pp. 309, 313.

Lethe Alberta, Butler, Ann. and Mag. Nat. Hist. 1871, p. 283, ♂; *id.* Lep. Exotica, p. 87, pl. 33, fig. 5 (1872), ♂. Marshall and de Nicéville, Butt. of India, etc. i. p. 147 (1883).

IMAGO.—Male. Upperside dark violescent ochreous-brown; cilia alternated with cinereous. *Forewing* with an indistinctly-defined transverse discal erect straight diffused dusky line. *Hindwing* with a similar wavy curved discal line, beyond which is a series of five large blackish spots, each with a slight rufescence outer ring, the four upper blind, the fifth with a minute white pupil; at the anal angle is a more or less indistinct sixth minute ocellus. Underside dark olivescent ochreous-brown; crossed by a glossy lilacine-blue outer-bordered straight subbasal dark brown line and a discal line, the latter line on the hindwing being very slightly but bluntly angulated on the median veins; a short lilacine-bordered streak also crossing middle of the cell of the forewing; marginal lines dark brown. *Forewing* with a slightly curved series of six ocelli, the upper one sometimes undeveloped, each with very small black centre and white pupil, an ochreous ring, then a brown ring, and lastly an outer lilacine-blue ring. *Hindwing* with a series of six prominent black ocelli, the upper first and fifth the largest, the lowest duplex, each with a white pupil, an ochreous ring, then a brown ring, and lastly a distinct glossy lilacine-blue outer ring; inner marginal line also lilacine bordered and with a subanal lilacine triangular streak.

Female. Upperside somewhat paler. *Forewing* with the transverse discal line more or less slightly sinuous and also slightly pale-bordered externally; the anterior ocelli of the underside being also slightly visible. *Hindwing* with more prominent ocelli, and each with brighter reddish-ochreous outer ring. Underside somewhat paler than upperside; the transverse lines the same, though the discal line on the hindwing is slightly more angular; ocelli the same. Body and legs beneath pale brownish-ochreous; sides of palpi ochreous-white; antennæ reddish-ochreous with pale rings and blackish subterminal band.

Expanse, ♂ $2\frac{5}{8}$ to $2\frac{7}{8}$, ♀ 3 to $3\frac{1}{2}$ inches.

DRY-SEASON BROOD (Plate 81, fig. 1, d, e, ♂, ♀.)

Debis Dolopes, Hewitson, Ent. Monthly Mag. 1872, p. 85, ♀.

Letha Dolopes, Marshall and de Nicéville, Butt. of India, etc. i. p. 147 (1883).

IMAGO.—Male. Upperside as in the wet-season brood, except that the black spots on the hindwing are somewhat smaller. Underside with the basal two-thirds dark brown, but slightly paler and of a duller tint than in the wet-season brood; the transverse pale-bordered subbasal and discal line and the cell streak the same; the outer borders of both wings much paler and of a very pale olivescent-ochreous colour, which contrasts strongly with the dark basal portion. *Forewing* with the five ocelli smaller and much less defined. *Hindwing* also with the ocelli smaller and less defined, being about half the size of those in the wet-season brood.

Female. Upperside paler than in male. *Forewing* with the transverse discal sinuous line distinctly pale bordered. *Hindwing* with the black spots distinctly ochreous ringed. Underside as in the male, but paler throughout.

Expanse, ♂ $2\frac{5}{8}$, ♀ $2\frac{5}{8}$ to $3\frac{1}{8}$ inches.

HABITAT.—Sikkim; Bhotan; Assam; Khasia and Naga Hills; Chittagong; Arakan; Upper Tenasserim.

To Dr. Rogenhofer, the Custodian of the Zoological Museum, Vienna, we are indebted for having kindly favoured us with a coloured drawing of the type specimen described by Dr. Felder as *D. Vindhya*, and thus enabling us to identify it as being the same as Mr. Butler's *D. Alberta*.

Regarding the fact that *Vindhya* represents the wet-season form and *Dolopes* the dry-season form of this species, there can be no possible doubt.

Of the illustrations of this species on our Plate No. 81, figs. 1, 1a, b, c, represent the male and female of the wet-season brood, from the Khasia Hills, and fig. 1d, a male of the dry-season brood, also from the Khasia Hills, kindly lent for this purpose by Mr. H. J. Elwes, and fig. 1e, that of the female of the dry-season brood, this latter being the *Dolopes* of Hewitson.

DISTRIBUTION.—According to Mr. H. J. Elwes (Tr. Ent. Soc. 1888, 313), “this species is very rare in Sikkim and in Bhotan, and in the Khasia Hills. Mr. Gammie took a single female close to his house, at 3800 feet, in August. Messrs. Knyvett and Möller's native collectors took specimens near Buxa in Bhotan, and I took a single male myself near Cherra Punji in the Khasia Hills, at the end of September, at about 2500 feet.” Specimens of the wet-season brood from Shillong and the Naga Hills are in the collection of Mr. P. Crowley. “In the Indian Museum, Calcutta, there are males from Sibsagar, Assam” (Butt. of India, 146). Specimens were taken by Lieut. D. Thompson on the Chittagong side of the Chin Hills, in the cold weather, during the Chin-Lushai Expedition of 1889-90 (Journ. Bomb. N. H.

Soc. 1890, 295), and by Capt. E. Y. Watson on the Burmese side of these hills during the same expedition, "three males and one female being taken at Tiling, 1000 feet, in March" (J. Bomb. N. H. Soc. 1891, 10). Major C. H. E. Adamson (Cat. Butterflies collected in Burma, p. 8) records "three specimens from the Moulmein District and Arakan, in April." Capt. C. T. Bingham (Butt. Ind. 146) "took a single male in the Donat Range, Upper Tenasserim, in January. A specimen from Tenasserim, taken by Capt. Bingham is in the British Museum Collection.

DEBIS SERBONIS (Plate 80, fig. 3, 3a, b, ♂ ♀).

Debis Serbonis, Hewitson, Ent. Monthly Mag. 1876, p. 151; *id. Desc. Lep. Coll. Atkinson*, p. 2, pl. 1, figs. 4, 5 (1879), ♂.

Lethe Serbonis, Marshall and de Nicéville, Butt. of India, etc. i. p. 155 (1883). Elwes, Trans. Ent. Soc. Lond. 1888, p. 310.

IMAGO.—Male. Upperside dark olivescent ochreous-brown, glossy; marginal lines and a submarginal fascia dusky-brown; cilia edged with cinereous. *Forewing* crossed by an extremely indistinct broad dusky discal *glandular fascia*, which is clothed with long and short broad ribbed-scales with dentated tips, and intervening long slender androconia with rounded or truncated base and hair-like tasselled tips, some shorter, stouter hair-tipt scales; and long slender interspersed hairs; beyond which is a pale subapical spot and below the latter a small blackish spot. *Hindwing* with four small submarginal blackish spots, the lowest being most distinct, white pupilled and slightly pale ringed. Underside bright pale olivescent ochreous-brown. *Forewing* crossed by a dark red-brown subbasal line, an inner and an outer short line within the cell, and a wavy—almost sinuous—discal band, the latter pale ochreous bordered externally at its costal end; beyond is a pale ochreous subapical spot cut by the veins, and below it are two small perfect pale brown ocelli, followed by a submarginal dark brown fascia and two marginal lines. *Hindwing* crossed by a prominent red-brown subbasal and a discal wavy line, a series of six prominent ocelli, the upper first, the fifth and sixth being the largest, the sixth duplex, each with a black centre, white pupil, ochreous ring, a black ring, and then an outer ochreous ring, the second, third and fourth the smallest and with minute black centre, white pupil, and similar outer rings; marginal lines dark brown, the inner line bordered posteriorly with red-brown.

Female. Upperside somewhat paler olivescent-brown, glossy; dark marginal lines and submarginal fascia distinct. *Forewing* distinctly palest beyond the transverse discal prominent dusky line, which is slightly undulate, paler bordered externally especially at its costal end; the subapical pale spot and slightly visible lower pale-bordered black spots. *Hindwing* with five submarginal pale-bordered black spots, the lowest with a white pupil. Underside with the ground-colour much

paler and of a brighter ochreous tint than in the male; the transverse markings also brighter red-brown. *Forewing* with the pale outer-bordered discal line inwardly suffused with red-brown; and three ocelli present below the pale subapical spot. *Hindwing* similarly marked. *Body* beneath and legs ochreous; sides of palpi and forelegs beneath paler; antennæ dark ochreous, with black subterminal band.

Expanse, $2\frac{7}{8}$, ♀ $2\frac{3}{8}$ inches.

HABITAT.—Sikkim.

DISTRIBUTION.—“Not uncommon in Sikkim, in the dense virgin forests on Tonglo, Tendong, and Sinchul, from 7000 to 9000 feet, in the rainy season between June and September.” (Elwes, Tr. Ent. Soc. 1888, 317.)

INDO-MALAYAN AND CHINESE ALLIED SPECIES OF DEBIS.—*D. Chinensis* (Leech). Allied to *D. Chandica*. *Habitat.* W. China.—*D. Negrito*, Felder, Wien. Ent. Monat. 1863, p. 124. *Syn.* *D. Isabella*, Butler, P. Z. S. 1866, p. 41, pl. 3, fig. 4, ♂. *Habitat.* Philippines.—*D. Manthara*, Felder, Reise Novara, Lep. iii. p. 497 (1867). Butler, Ann. Nat. Hist. 1867, p. 403, pl. 9, fig. 9, ♂. Closely allied to *D. Mekara*, but somewhat paler beneath, with glossy whitish borders to the transverse lines and also to the ocelli. Examples in the Hewitsonian and British Museum Collection. *Habitat.* Java.—*D. Hecate* (Leech, Entomologist, 1891, p. 3). *Habitat.* W. China.—*D. Cyrene* (Leech, Entomologist, 1890, p. 27). *Habitat.* W. China.—*D. Davidi*, Oberthür, Etudes Entom. vi. p. 15, pl. 7, fig. 5 (1881). *Habitat.* W. China.—*D. Laodamia* (*Lethe Laodamia*, Leech, Entomologist, 1891, p. 67). *Habitat.*—W. China.

The following is a Chinese allied genus and species. Gen. nov. *Placilla*. Wings broad. *Male.* Upper surface scarcely hairy. *Forewing* triangular, exterior margin slightly scalloped; with an indistinctly defined dusky broad transverse discal glandular fascia. *Hindwing* broadly ovate; exterior margin convex and acutely scalloped; with a conspicuous large rounded *glandular patch of blackish lustrous scales* situated upon the lower disc and extending across the middle and lower median veinlets. Type *P. Christophi* (*Lethe Christophi*, Leech, Entomologist, 1891, p. 67). *Habitat.* W. China. A second species of this genus is *P. Camilla* (*Lethe Camilla*, Leech, *id.* p. 3). *Habitat.* W. China.

Genus LETHE.

Lethe, Hübner, Verz. bek. Schmett. p. 56 (1816). Moore, Lep. of Ceylon, i. p. 16 (1880). Distant, Rhop. Malayana, p. 43 (1882). Scudder, Proc. Amer. Acad. A. and S. Boston, 1875, p. 205.

Lethe (group 2, part), Marshall and de Nicéville, Butt. of India, etc. i. p. 143 (1883). Elwes, Trans. Ent. Soc. Lond. 1888, p. 309.

Debis (part), Doubleday and Westwood, Gen. D. Lep. p. 358 (1851).

IMAGO.—Wings broad; basal area hairy. *Forewing* triangular; costa arched, apex convex, exterior margin waved, slightly concave, posterior margin long,

straight; costal, median, and submedian vein slightly swollen; cell broad across the middle; discocellulars bent close to upper end and at one-third, lower excurved, radials from the angles; median veinlets equidistant and wide apart. *Hindwing* short; costa convex, exterior margin sinuous and bluntly tailed at end of upper median, abdominal margin long; cell rather short and broad; discocellulars oblique, rounded in the middle; two upper medians from end of the cell. *Body* rather stout; eyes densely clothed with short very fine hairs; antennæ with an elongated slender club.

ADULT CATERPILLAR.—Fusiform; head conical, the vertex pointed and projected forward, anal segment acutely pointed and projected hindward.

CHRYSALIS.—Suspended by the tail; broad, and truncated anteriorly, abdominal segments dorsally convex, head and vertex both pointed.

TYPE.—*L. Europa*.

LETHE EUROPA (Plate 82, figs. 1, 1a, ♂ ♀).

Papilio Europa, Fabricius, Syst. Ent. p. 500, (1775); Ent. Syst. iii. i. p. 76 (1793).

Oreas Marmorea Europa, Hübner, Samml. Exot. Schmett. Band i. pl. 90, fig. 1-4 (1805).

Lethe Europa, Hübner, Verz. bek. Schmett. p. 56 (1816). Butler, Catal. Satyr. Brit. Mus. p. 114 (1868); Catal. Fabr. Lep. B. M. p. 29 (1869). Distant, Rhop. Malay. p. 43, pl. 5, fig. 5, 6, ♂ ♀ (1882). Marshall and de Nicéville, Butt. of India, etc. i. p. 149 (1883). Staudinger, Exot. Schmett. p. 221, pl. 78, ♀ (1887).

Satyrus Europa, Godart, Ency. Méth. ix. p. 478 (1819).

Debis Europa, Westwood, Gen. D. Lep. p. 359 (1851).

Papilio Beroe, Cramer, Pap. Exot. i. pl. 79, fig. C. D. (1779), ♀.

IMAGO.—Male. Upperside olivescent ochreous-brown; marginal line slender, blackish, and narrowly bordered with pale ochreous broadly interrupted with dusky-black; cilia alternated with pale ochreous. *Forewing* with the transverse subbasal line, the oblique discal band, and the ocelli of the underside more or less apparent; two more clearly defined superposed apical whitish spots. *Hindwing* with a series of more or less obsolescent dusky-black submarginal spots, the subapical spot coalescing with the dusky margin. Underside much darker olivescent ochreous-brown; crossed by a prominent violet-white subbasal narrow band on both wings. *Forewing* with a broad short oblique discal band, which is violet-white anteriorly and ochreous posteriorly, and terminates at the middle of the incurved series of six pale violet blind ocelli, each of which has a small irregular-shaped pale-bordered blackish centre, and all encompassed within a violet-white outer bordering line; apex of wing with a small violet patch; marginal line ochreous bordered. *Hindwing* with an acutely sinuous angulated discal line, contiguous to which are six large longitudinally-narrow, confluent, dark ochreous ocelli, the lowest being duplex, each having a

large black centre speckled with ochreous-white scales, the black centres of the five lower ocelli being more or less irregularly broken and incomplete, the upper ocellus is the largest and more oval in shape, all being encompassed by a prominent violet outer sinuous line, the inner portion of this line forming the violet border to the dark sinuous discal line ; marginal line with a violet inner-bordering line.

Female. Upperside either somewhat paler or of a more dusky-brown than the male ; marginal line whitish-bordered. *Forewing* with a prominent transverse oblique discal broad pure white entire band, the apical white spots similar. *Hindwing* with the pale-bordered dusky-black ocelli of the underside more or less indistinctly visible. Underside of the same colour as in male ; markings the same, except that on the forewing the oblique white band extends to near the posterior angle and nearly obliterates the ocellus between the middle and lower median veinlets ; the ocelli on the hindwing are also sometimes more elongated. *Body* beneath dark brown ; legs beneath and sides of palpi pale brownish-ochreous.

Expanse, $2\frac{6}{8}$ to $3\frac{1}{8}$ inches.

HABITAT.—Plains of India ; W. and E. Himalayas ; Assam ; Khasias ; Burma ; Andamans ; Malayia ; China.

DISTRIBUTION WITHIN INDIAN AREA.—In his list of Kumaon butterflies (J. A. S. Beng. 1886, 115), Mr. Doherty records it from “Ranibagh at the foot of the hills, 1000 feet.” Mr. de Nicéville took it in October in Sikkim Terai (J. A. S. Beng. 1880, 49). According to Mr. Elwes (Tr. Ent. Soc. 1888, 314), “this is not a common butterfly in Sikkim. It is probably rather an inhabitant of the plains, and only a straggler in the low valleys of Sikkim.” Mr. J. A. Betham (Journ. Bombay Nat. Hist. Soc. 1890, 157) obtained it in the Central Provinces, and says, “this is a shade-loving insect, but is easily procured in the evening at sugar. They are also fond of Mhowa (*Bassia latifolia*) refuse after the spirit has been extracted from the flowers. It is shy and easily scared.” It was taken by the late Dr. F. Day at Coonoor, and Mr. Hampson (J. A. S. Beng. 1888, 348) obtained it on the Nilgiris from 3000 to 5000 feet ; rather rare. Mr. W. C. Taylor (List of Orissa Butterflies, p. 2) records it as not uncommon at Khorda. The late Mr. W. S. Atkinson obtained it in the neighbourhood of Calcutta, and “Major Marshall found it commonly in the Barrackpore Park in November.” (Butt. India, i. 150). Mr. J. Rothery (Ent. Mo. Mag. 1882, 34) also records it from Barrackpore Park near Calcutta, and Mr. de Nicéville (J. A. S. Beng. 1885, 42) says that “in the Calcutta District this species is found in the cold weather affecting dry ditches, occurring also during the rainy season.” Mr. Wood-Mason (J. A. S. Beng. 1886, 350) records “several specimens taken in the forests around Silchar in Cachar.” Major Godwin-Austen obtained it in the Khasias, and the late Mr. W. S. Atkinson took it in Silhet and Cherra Punji.

Mr. de Nicéville also records it from Assam. Major C. H. E. Adamson (Catal. of Burmese Butterflies, p. 8) states that it is "common in Burma." Capt. E. Y. Watson (Journ. Bombay N. H. Soc. 1891, 10) obtained it during the Chin-Lushai Expedition of 1889-90, "from Pauk to Tilin, in November, and at Tilin from November to May." Signor Leonardo Fea obtained it at Bhamo in November. In Upper Tenasserim, "Capt. C. T. Bingham took it from December to April" (Butt. India, i. 150). Messrs. Elwes and de Nicéville (J. A. S. Beng. 1887, 417) records it from Tavoy, and Dr. J. Anderson (Journ. Linn. Soc. Zool. 1886, 32) obtained it in "Mergui during March." In the Andamans, the late Mr. F. A. de Roepstorff (P. Z. S. 1877, 582) took numerous specimens at Port Blair.

DISTRIBUTION OUTSIDE INDIAN AREA.—It was obtained in Siam by the late Mr. Mouhot. Mr. Distant (Rhop. Malayana, p. 43) records it from Malacca and Penang Island, "appearing in paddy-fields at dusk." Mr. W. Doherty (J. A. S. Beng. 1891, 24) obtained it on Engano Island (Nias group), remarking that it was "scarce." It is also recorded from Sumatra. The late Dr. Horsfield (Catal. Lep. Mus. E. I. C. i. p. 216) took it in Java, these specimens being identical with Indian examples. Mr. H. Druce (P. Z. S. 1873, 339) records it from Borneo. I have it from Sarawak. Herr G. Semper (Reisen Archipel. Philippen Lep. i. p. 44) records it from Luzon and Mindanao. Specimens from Hong Kong are in Mr. J. H. Leech's Collection, and also in the British Museum. The late Consul R. Swinhoe (P. Z. S. 1878, 698) obtained it on the Island of Hainan and also on Formosa (P. Z. S. 1866, 360) remarking that it "loves to cluster on bamboo stems." There is a specimen of the female in the British Museum from Kiukiang on the Yangzee, W. China. Specimens have been verified from all the above-mentioned localities. It does not occur in Celebes, as has been recorded by Herr Snellen, the species from the latter island being *L. Arcuata*, Butler, and totally distinct both from *L. Europa* and from *L. Arete*, Cram., from Sula—as verified by personal comparison of specimens of both sexes of these species in our own collection.

LETHE TAMUNA (Plate 82, fig. 2, ♀).

Lethe Tamuna, de Nicéville, Proc. Zool. Soc. Lond. 1887, p. 449, pl. 39, fig. 6, ♀.

IMAGO.—Male unknown. "Female. Upperside dull, dark fulvous. Forewing with the apical half fuscous, bearing two pure white spots below the costa, placed midway between the apex and the median ochreous band, the upper of the two spots much the smaller, and divided into two portions by the fourth subcostal nervule; below these spots in the upper discoidal interspace is an obscure oval black spot; near the margin are four bright ochreous lunules placed between the veins from

the lower discoidal nervule to the inner angle, beyond these lunules in each interspace is a fine ochreous line; across the disk of the wing, from the middle of the costa to near the inner angle, is a broad bright ochreous band, its inner edge nearly straight and even, its outer edge produced into points between the veins, the lower portion of the band composed of two spots (the lower one very small) in the submedian interspace. *Hindwing* with the ocelli of the underside more or less showing through by transparency; a series of bright ochreous lunules with inner dark borders placed near the outer margin between the veins, with a darker ochreous line beyond. Underside dull brown. *Forewing* with a whitish subbasal line crossing the middle of the discoidal cell from the subcostal to the submedian nervure; the broad discal band as above, but with its edges more even and wider at its lower end; beyond it are four ill-shaped ocelli with black pupils dotted with white, a pale violet ring, then a browner ring and an outer pale violet ring; the margin marked much as above. *Hindwing* with a subbasal line in continuation of that on the forewing, not reaching the abdominal margin; a discal series of ocelli placed on a pale violet band, which more or less follows their outline; the upper ocellus very large, its centre deep black dotted with white, then a broad rich ochreous ring, outwardly defined with a fuscous ring; the next largest ocellus is in the first median interspace, with two very small, equal-sized ocelli in the interspaces above and below it, and two very small and indistinct ocelli divided by the discoidal nervule; the bright ochreous lunules on the margin of the upperside white, almost silvery on the underside."

"*Expanse, ♀ 2 $\frac{7}{8}$ inches.*"

HABITAT.—Little Nicobar.

"This is a local form of the widely-distributed *L. Europa*, which occurs in the Andamans (but is replaced apparently in the Nicobars by this species). The female may be at once distinguished from the same sex of *L. Europa* by its more tawny coloration on the upperside, the *discal band bright ochreous* instead of white, with its outer edge more irregular, and by the underside of the hindwing having four well-formed perfect ocelli; in *L. Europa* the black middle portion of all the ocelli except the upper one is entirely disintegrated and broken up into black dots. Mr. E. H. Man obtained a single specimen on Little Nicobar."

The illustration of this species on our Plate 82, fig. 2, represents the female, reproduced from Mr. L. de Nicéville's figure of the type specimen.

LETHE DRYPETES (Plate 83, figs. 1, 1a, b, c, d, ♂ ♀, and larva and pupa).

Debis Drypetes, Hewitson, Exotic Butterflies, iii. p. 76, *Debis* pl. 2, figs. 11, 12 (1863), ♀.

Lethe Drypetes, Moore, Lep. of Ceylon, i..p. 17, pl. 8, figs. 1, a, b, ♂ ♀ (1880); *id.* pl. 210, figs. 5, 5a, larva and pupa.

Debis embolima, Butler, Ent. Monthly Mag. iii. p. 77 (1866), ♂; *id.* Catal. Satyr. Brit. Mus. p. 115 (1868).

Lethe Todara, Moore, Trans. Ent. Soc. Lond. 1881, p. 305. Marshall and de Nicéville, Butt. of India, etc. i. p. 151 (1883). Hampson, J. A. S. Beng. 1888, p. 348.

IMAGO.—Male. Upperside dark olivescent ochreous-brown, glossy; marginal lines darker brown; cilia brownish-ochreous. *Forewing* without markings, except a faint trace of a pale apical spot, and of the blackish ocelli of the underside. *Hindwing* with three or four submarginal very indistinct small black spots. Underside dark brown, suffused with a more or less vinaceous tint; both wings with a transverse subbasal wavy purplish-grey bordered dark duplex line. *Forewing* with a dark brown oblique transverse discal purplish-bordered band, which is angulated at end of the cell and below the lower median veinlet; followed by a submarginal curved row of five small purple-bordered ocelli, the upper one being ill-defined, and a marginal narrow dark brown pale-bordered line. *Hindwing* with a transverse discal medially-angulated purple-bordered dark brown line; a submarginal row of six purple-grey bordered ocelli, the upper one and the fifth only being regularly formed, with a black centre, white pupil and ochreous outer ring, the others are longitudinally oval and numerously white-speckled, the sixth being duplex; marginal line distinct and purple-grey bordered.

Female. Upperside paler olivaceous ochreous-brown, externally dusky-brown. *Forewing* with an oblique transverse discal ochreous-white irregular band broken by the upper and middle median veinlets, and extending only to the lower median veinlet; two small subapical ochreous-white spots, and three submarginal small indistinct black spots. *Hindwing* with four upper submarginal ochreous-yellow bordered black spots, the upper second spot being large, quadrate, and extending to the pale-bordered marginal line, the third and fourth smaller and black, the upper first and the two lowest being the ocelli of the underside more or less indistinctly indicated. Underside paler, markings as in the male, except that on the forewing the oblique discal band is purplish-white, the lower submarginal ocellus sometimes absent, or present only as a minute brown dot; and the ocelli on both wings are more prominent and bordered with purplish-white. *Body* beneath, legs and palpi at the sides brownish ochreous.

Expanse, $2\frac{1}{2}$ to $2\frac{3}{4}$ inches.

ADULT CATERPILLAR.—Fusiform; head conical, the vertex pointed and projected forward, anal segment acutely pointed and projected hindward. Colour pale green with paler transverse lines on each segment, a lateral and a sublateral pale-bordered reddish stripe extending the whole length, including the head and anal segment. Feeds on bamboo.

CHRY SALIS.—Suspended by the tail; broad, and truncated anteriorly, abdominal segments dorsally convex, head and vertex both pointed; colour pale green.

HABITAT.—S. India; Ceylon.

There is no distinctive difference between South Indian specimens and those of Ceylon.

DISTRIBUTION.—In his “List of Orissa Butterflies,” p. 2, Mr. W. C. Taylor records it as “not uncommon at Khurda.” Specimens have been “taken at Mynall, at 2000 feet in May,” also at 3000 feet in March and April, and “at Trevandrum in June,” as well as at Calicut in September (Butt. India, 151). Mr. G. F. Hampson (J. A. S. Beng. 1888, 348) obtained it on the “Nilgiris at 3000 to 5000 feet, being common in the low country jungles and on the slopes of the Hills.” A female obtained by Mr. Davidson on the Anaymalai Hills, 3000 to 4000 feet, South of the Palghat Gap, is in the Collection of Mr. F. D. Godman. In Ceylon, Capt. Hutchison (Lep. Ceylon, i. 18), took it “in the Hills of the Central Province, at 3000 feet and slightly above, at all times; being very local, and found in several spots of limited extent.” Mr. F. M. Mackwood notes that it is “sometimes found at lower elevations, but as a rule over 3000 feet.” Mr. E. E. Green captured it at Pundaloya in March and April.

Of the illustrations of this species on our Plate No. 83, figs. 1, 1a, b, c, represent the male and female, and fig. 1d the larva and pupa from drawings made by Mr. E. Ernest Green in Ceylon; the larva having been taken feeding on Bamboo.

LETHE DYRTA (Plate 82, figs. 3, 3a, b, c, ♂ ♀).

Debis Dyrta, Felder, Reise Novara, Lep. iii. p. 497 (1867), ♀..

Letha Dyrta, Butler, Catal. Satyr. Brit. Mus. p. 115 (1868); *id.* P. Z. S. 1886, p. 357. Marshall and de Nicéville, Butt. of India, etc. i. p. 152, pl. 10, fig. 22, ♂ ♀ (1883). Elwes, Trans. Ent. Soc. Lond. 1888, p. 309. Staudinger, Exot. Schmett. p. 221, pl. 78, ♂.

IMAGO.—Male. Upperside olivaceous-brown, darkest apically on the forewing; marginal lines pale ochreous-bordered; cilia alternated with white. *Forewing* with two subapical whitish spots, and a costal whitish spot traversed by the subcostal veinlets, this latter spot forming the upper end of the oblique transverse pale band of the underside which is slightly apparent from the upperside, as are also the four ocelli of the underside. *Hindwing* with the ocelli of the underside slightly visible. Underside olivaceous-brown; crossed by two dark brown subbasal and a discal somewhat sinuous lilacine-white narrow band, the inner subbasal being ill-defined, and both the inner and outer line on the forewing only crossing the cell; marginal line externally bordered with ochreous and internally with lilacine-white. *Forewing* with

an oblique angulated discal lilacine-white band externally bordering the discal line and crossed by the brown veins, contiguous to which is a curved series of prominent ocelli encompassed by a lilacine outer border ; one or two upper ocelli being also incipiently indicated. *Hindwing* with six ocelli, the upper one very large and oval, the fifth smaller and reversely oval, both with a large black centre and narrow ochreous outer ring, the upper one with a prominent white pupil and several white speckles ; the fifth blind ; the second, third, fourth, and sixth narrow, with partly ochreous and black broken centre and white speckles, the sixth being duplex, all encompassed in a prominent lilacine-white outer sinuous line.

Female. Upperside olivaceous-brown. *Forewing* darkest externally ; crossed by a prominent oblique white wavy band ending in a more or less apparent small spot above the submedian vein ; two costal white spots, and the three blackish ocelli of the underside slightly visible. *Hindwing* with the ocelli of the underside slightly visible. Underside of the same colour but somewhat paler than in male ; the transverse lilacine-white lines narrower and also paler, the marginal-bordered lines the same, and also the ocelli on the hindwing, but on the forewing is the broad white oblique band, which extends uninterruptedly in a curve to the submedian vein ; there are also only three prominent ocelli on the forewing, besides the two upper incipient spots, the one between the middle and lower median veinlets being entirely absent. *Body* beneath, legs and sides of palpi pale ochreous.

Expanse, ♂ 2 to $2\frac{4}{8}$, ♀ 2 to $2\frac{5}{8}$ inches.

HABITAT.—N.W. and E. Himalayas ; Khasia Hills ; Burma.

DISTRIBUTION AND HABITS.—In the N.W. Himalayas it was obtained by the late Dr. Bayne Reed “in Kashmir from May to September, being very common about houses” (Notes 1872). The late Capt. H. B. Hellard, in his “Notes,” records it as being taken at “Simla, Masuri, and Kashmir—from June to October.” Capt. (now Colonel) A. M. Lang obtained it at Kassowlie, 6000 feet, frequenting grassy slopes in the shade or near hedges ; “constantly pitching under bushes or at roots of trees, and lying *perdu*.” (P. Z. S. 1865, 498, where these remarks are assigned to *D. Europa*—*Dyrta* not having been discriminated at that date.) We have a male of *Dyrta*, taken by Colonel Lang at “the Krolee, Kussowlie, in April.” Major J. W. Yerbury (P. Z. S., 1886, 357) records the capture of specimens of the “male at Bugnoter in September, about 4000 to 5000 feet, and between Bugnoter and Abbottabad also in September ; at Kali Pani, about 5000 feet, in September, and at Tret in October. Females also taken between Trct and Murree also on the same day in October. Specimens again were taken at Dewal in August, and afterwards found commonly below Bugnoter in September, and between Abbottabad and Kali Pani.” Major Yerbury also notes (Ann. Nat. Hist. 1888, 135) its capture near Kooteer, Chittah, Pahar, about 2000 feet, in October. Very common below Bugnoter on

the Murree and Abbottabad Road, also near Kala Pani in September. A single specimen taken in Chittar Pahar at April, also taken at Dewal, Murree, and on the Kashmir Road. Rev. J. H. Hocking (P. Z. S. 1882, 235) obtained it in the Kangra District. Mr. W. Doherty (J. A. S. Beng. 1886, 115) records it from the "Lower Himalayan tract, in Kumaon, at 3000 to 6000 feet." In the Eastern Himalayas, according to Mr. Elwes (Tr. Ent. Soc. 1888, 314), this is "not a common species, but found throughout the year at elevations up to 3000 or 4000 feet." Mr. de Nicéville (J. A. S. Beng. 1883, 93) obtained it in "Sikkim, in October." It is recorded (Butt. Ind. 152) from the "Khasia Hills, in May and November." In Burma, according to Major C. H. E. Adamson (Catal. of Burmese Butterflies, p. 8), "this butterfly is very common at Bhamo throughout the rains." Capt. E. Y. Watson (Journ. Bombay N. H. Soc. 1891, 10) obtained it during the Chin-Lushai Expedition from "Pauk to Tilin, in October, and at Tilin from March to May." In the Shan States, Dr. N. Manders (Tr. Ent. Soc. Lond. 1890, 518) records it as "very common all the year round." Capt. C. T. Bingham (Butt. Ind. 152) found it in Tenasserim.

DISTRIBUTION OUTSIDE INDIAN AREA.—Both sexes were obtained in Java by the late Dr. Horsfield. A specimen labelled "China" is in the British Museum Collection, and a male from Amoy in the Hewitsonian Collection. Specimens from Kiukiang, W. China, are in Mr. J. H. Leech's Collection, and also in that of Mr. H. Grose-Smith.

LETHE NEELGHERIENSIS (Plate 84, figs. 1, 1a, b, c, d, ♂ ♀ and larva).

- Satyrus (Cyllo) Neelgheriensis*, Guerin, in Delessert's Voyage dans l'Inde, pt. 2, p. 74, pl. 21, figs. 1, 1a, (1843), ♂.
Debis Neelgheriensis, Moore, Catal. Lep. Mus. E. I. Company, i. p. 217 (1857). Hewitson, Exotic Butt. iii. p. 75, *Debis* pl. 2, fig. 6, ♀ (1863).
Lethe Neelgheriensis, Butler, Catal. Satyr. Brit. Mus. p. 115 (1868). Moore, Lep. of Ceylon, i. p. 16, pl. 7, figs. 1, 1a, ♂ ♀ (1880); *id.* pl. 210, fig. 4, larva.

IMAGO.—Upperside dull dark olive-brown, more dusky-brown apically; cilia alternated with white. Male.—*Forewing* with two small ochreous-white apical spots, a larger costal spot, and a less distinct spot between the middle and lower median veins; between these the ocelli of the underside are indistinctly visible; beyond is a marginal indistinct dusky double lunular line. *Hindwing* with the pale-bordered blackish ocelli of the underside indistinctly visible; marginal lines dusky-brown, pale ochreous bordered. Underside paler, and of a violescent-brown tint; crossed by two subbasal and a discal sinuous lilacine-grey bordered band, the inner subbasal indistinct, and the inner and outer line on the forewing only crossing the cell and widely separated, the discal line on the hindwing angulated at the upper median

veinlet. *Forewing* with an oblique ochreous-white band broadly externally bordering the discal line ; beyond is a submarginal row of four prominent purple-bordered ocelli and two small upper apical incipiently formed spots ; marginal line purple-grey bordered. *Hindwing* with a submarginal series of six prominent ocelli, the upper one very large, oval, the fifth smaller, round, the others more elongated, the lowest being duplex, each ocellus deep black, the first and fifth perfect and with a white pupil, the others black speckled, an ochreous and then a brown outer ring, and all again encircled by a purple-white ringleted line ; marginal line purple-bordered internally and ochreous externally.

Female. Upperside. *Forewing* with two prominent ochreous-white apical spots, and three oblique transverse discal spots, the small blackish ocelli of the underside being slightly visible. *Hindwing* with the pale-ringed blackish ocelli of the underside more distinctly visible, the upper two or three being externally bordered with ochreous-white ; marginal lines ochreous bordered. Underside as in the male, but brighter coloured ; markings the same, except that on the forewing the oblique discal ochreous-white band is broader and irregularly continuous, and extending to the posterior angle ; the lower ocellus is absent, though indicated by a small black central spot. *Body* beneath brownish-ochreous ; palpi at the sides, fore-legs and femora beneath, whitish.

Expanse, $2\frac{4}{5}$ to $2\frac{5}{6}$ inches.

ADULT CATERPILLAR.—Fusiform, elongated ; head conical, the vertex being prolonged to an acute point projecting forward ; anal segment also prolonged to a point projecting hindward. Colour green, with darker dorsal and lateral stripes, and a slight ochreous subdorsal stripe. "Feeds on grasses" (E. E. Green).

CHRYsalis.—Unknown.

HABITAT.—Central and Southern India ; Ceylon.

This species is distinguishable from *L. Dyrta*, in the male, by the upperside having a more prominent costal and apical spots, and in the presence of a lower marginal spot between the middle and lower median veinlets, and on the underside, though extremely alike, the middle, pale band crossing the cell on the forewing is always broader. In the female the oblique discal ochreous-white band on the forewing is macular, and is composed of three widely-separated spots.

DISTRIBUTION.—Mr. J. A. Betham (Journ. Bombay N. H. Soc. 1890, 158) records it from the Central Provinces, noting that "its habits are the same as *L. Europa*." According to Mr. de Nicéville (Butt. India, 154), "Colonel Swinhoe has taken it at Mhow in the autumn, and also commonly at Abu." Colonel Swinhoe (P. Z. S. 1885, 127) also records it from "Belgaum, and from Poona, in November," and (P. Z. S. 1886, 424) from "Mhow in April and May." He also obtained it at

Mahabaleshwar in May. Major J. W. Yerbury notes that he took it on Matheran Hill in October. Mr. E. H. Aitken (Butt. India, 154) "took it at Khandalla in April." The type specimen was taken on the Nilgiris. Mr. G. F. Hampson (J. A. S. Beng. 1888, 349) also obtained it on the Nilgiris, being common from 2000 to 7000 feet. The late Dr. J. Shortt sent me specimens from the Shevaroy Hills; and the late Dr. F. Day specimens from Coonoor. Mr. H. Ferguson (Butt. India, 154) "took it on the Ashamboo Hills in Travancore, in May, and again in Trevandrum in July." In Ceylon, Mr. Hutchison (Lep. Ceylon, i. 16) "found it in the neighbourhood of coffee plantations South of Newera Eliya, at about 3000 feet elevation; appearing plentiful, except from January to March." Capt. Wade also took it at Kandy and Dickoya. Mr. F. M. Mackwood (MS. Notes) remarks that it is "the most commonest of the group in Ceylon, being found everywhere above 3000 feet, and sometimes much lower, in shady places or in jungle, and all the year round." Mr. E. E. Green obtained it at Pundaloya.

Of the illustrations of this species on our Plate No. 84, figs. 1, 1a, b, c, represent the male and female, and fig. 1d the larva, reproduced from a drawing made in Ceylon by Mr. E. Ernest Green, who found it feeding on grass.

LETHE DARETIS (Plate 83, figs. 2, 2a, b, c, ♂ ♀).

Debis Daretis, Hewitson, Exotic Butterflies, iii. p. 75, *Debis* pl. 2, figs. 7, 8 (1863), ♀.

Lethe Daretis, Butler, Catal. Satyr. Brit. Mus. p. 118 (1868). Moore, Lep. of Ceylon, i. p. 18, pl. 7, figs. 2a, b (1880), ♂ ♀. Marshall and de Nicéville, Butt. of India, i. p. 151 (1883).

IMAGO.—Male. Upperside dark olivescent ochreous-brown, glossy; cilia alternated with ochreous-white. *Forewing* with a slightly apparent transverse discal dusky angular line, at the costal end of which is a very small ochreous-yellow spot above end of the cell, and beyond are two small less distinct spots before the apex. *Hindwing* with a submarginal row of five small indistinct black slightly pale-bordered spots. Underside dark brown; both wings with a subbasal and a medial transverse sinuous darker brown duplex-bordered purplish-grey band, the latter on the hindwing angulated between the radial and upper median veinlet. *Forewing* with a slightly oblique irregular discal transverse pale ochreous band externally bordering the angulated discal line; beyond which are five pale purplish-brown submarginal ocelli, the upper one ill-defined, each with small black centre and purplish-grey outer ring; marginal lunular line pale purplish-brown. *Hindwing* with six distinct well-formed purple-grey ringed submarginal ocelli, each with black centre, small white pupil, and a few minute white speckles; marginal line lunular, purple-grey.

Female. Upperside ferruginous olivescent-brown, dusky brown externally. *Forewing* with a prominent ochreous-yellow transverse discal macular band extending

to the submedian vein; two prominent ochreous-yellow subapical spots, and four or five, small, very indistinct blackish submarginal spots. *Hindwing* with a submarginal series of five well-defined ochreous-yellow bordered black oval spots, and a sixth or anal very slightly visible smaller spot; marginal line anteriorly bordered with ochreous-yellow. Underside of the same colour as in the male, markings the same, but more prominent, and except that on the forewing the oblique discal ochreous-yellow band is much broader, and paler. *Body* dark, paler beneath; palpi at the sides and fore-legs beneath greyish white; middle and hind-legs ochreous-brown, hind femora in female greyish-white beneath.

Expanse, ♂ $2\frac{1}{10}$, ♀ $2\frac{4}{10}$ inches.

HABITAT.—Ceylon.

DISTRIBUTION AND HABITS.—According to Capt. Hutchison (Lep. Ceylon, i. 18), “found all the year round, but most plentiful in the spring on the hills of the Central Province, at about 5000 to 6000 feet elevation, in grass land or close to forests. Rather shy; flight rapid, often settling down in grass or on open road.” Mr. F. M. Mackwood notes that it is “plentiful in roadways through jungle about 4000 feet and over.” Mr. E. Ernest Green obtained it at Pundaloya in August.

LETHE ROHRIA (Plate 84, figs. 2, 2a, b, c, ♂ ♀).

Papilio Rohria, Fabricius, Mant. Ins. ii. p. 45 (1787); Ent. Syst. iii. p. 75 (1793).

Satyrus Rohria, Godart, Eneye. Méth. ix. p. 479 (1819).

Debis Rohria, Westwood, in Doubleday and Hewits. Gen. D. Lep. p. 360 (1851). Moore, Catal. Lep. Mus. E. I. Compy. i. p. 217 (1857).

Lethe Rohria, Butler, Catal. Satyr. Brit. Mus. p. 116 (1868); Catal. Fabrician Lep. Brit. Mus. p. 29 (1869). Marshall and de Nicéville, Butt. of India, etc. i. p. 156 (1883). Elwes, Trans. Ent. Soc. Lond. 1888, p. 309.

IMAGO.—Male. Upperside dusky-brown, in fresh specimens violescent tinted, but with age fading to an olivescent tint; marginal lines blackish; cilia alternated with white. *Forewing* crossed by a prominent violescent-white oblique discal band, and two less prominent oblique subapical small spots, the upper one being cut by the subcostal veinlets. *Hindwing* with very faint traces of the pale-bordered black ocelli of the underside visible; marginal lines ochreous-bordered. Underside more or less dark brown, with either a violescent or olivescent-castaneous tint; marginal blackish lines distinct, the outer line bordered with ochreous and the inner line with more or less vivid bluish-grey. *Forewing* with a prominent transverse subbasal more or less vivid bluish-grey nearly straight line; the oblique discal violescent white band as on the upperside; a narrow bluish-grey costal spot, below which are three decreasing ochreous-ringed ocelli, the lowest ill-defined, or sometimes absent, all encompassed by a bluish-grey narrow line continued on each side from the costal

spot. *Hindwing* with a similar prominent bluish-grey subbasal line and an angulated discal line, beyond which is a series of six prominent black ocelli, the upper one and the fifth being the largest, the sixth duplex, each with a distinct white pupil, ochreous ring, then a dark brown ring, and all encircled by a more or less vivid bluish-grey outer ring; in some specimens these ocelli possess some white speckles in addition to the white pupil.

Female. Upperside of the same colour as in the male. *Forewing* with the oblique white band slightly broader, and the oblique subapical white spot more prominent. *Hindwing* with the ocelli of the underside more distinctly visible. Underside of the same colour, but paler, and less brilliant than in the male, the markings the same. *Body* and legs beneath pale brownish-ochreous; sides of palpi greyish-white; antennæ black above, with ochreous tip.

Expanse, ♂ 2 to $2\frac{4}{8}$, ♀ $2\frac{4}{8}$ inches.

HABITAT.—N.-W. and E. Himalayas; Khasia Hills; Cachar; Burma; Java.

DISTRIBUTION.—Capt. Bayne Reed obtained it in Kashmir. “It is found in Kumaon at moderate elevations, and Colonel Lang possesses a specimen from Gurhwal. Mr. de Nicéville has taken specimens in the neighbourhood of Simla” (Butt. of India, i. 156). The Rev. J. Hocking (P. Z. S. 1882, 235) records it from the Kangra District. Mr. W. Doherty, in his list of Kumaon butterflies (J. A. S. Beng. 1886, 117), records it as “common in the Lower Himalayan tract, at 2000 to 7000 feet elevation.” The late General G. Ramsay obtained it in Nepal, and “Dr. Scully also took a pair at Khatmandu, in Nepal.” The late Mr. W. S. Atkinson obtained it at Darjiling. “Mr. Otto Möller has taken it in the Sikkim Tarai in July, in the Sikkim Hills, where it appears to be common, at 4000 feet elevation in April, August, September to November, and also in the Great Ranjit Valley in November, at 1200 to 3500 feet elevation, where Mr. de Nicéville also took it commonly in October” (Butt. of India, i. 156). Mr. H. J. Elwes (Tr. Ent. Soc. 1888, 315) records it as “common in the low valleys of Sikkim up to 5000 feet, from April till November.” Mr. G. C. Dudgeon obtained it in Sikkim in March. “In the Khasia Hills it is found in the autumn” (Butt. India, i. 156). Mr. J. Wood-Mason (J. A. S. Beng. 1887, 350) records specimens from “the forests in Silchar, and others taken on Nemotho, in Cachar, in September, the males of this species emitting a delicious vanilla-like scent.” Major C. H. E. Adamson (Catal. of Burmese Butterflies, p. 8) states that it is “common in the dry season.” Capt. E. Y. Watson (J. Bombay N. H. Soc. 1891, 10) obtained it during the late Chin-Lushai Expedition “from Pauk to Tilin in November, and at Tilin in March.” Dr. N. Manders (Tr. Ent. Soc. Lond. 1890, 518) says it is “a common species in the Shan States, having taken it during the rains and the commencement of the cold weather.” In Upper Tenasserim, Mr. Otto Limborg (P. Z. S. 1878, 824) obtained it at Hatseiga, Nathoung to Paboga, and at Tao, 3000 to

5000 feet elevation." "Captain C. T. Bingham took it in the Mepley Valley in February, and in the Upper Thoungeen forests in April, September, and October" (Butt. India, i. 156). Signor Leonardo Fea obtained it in the Karen Hills in September and November, and also at Bhamo in November. Messrs. Elwes and de Nicéville (J. A. S. Beng. 1887, 417) record it from Pонекай in Tavoy.

DISTRIBUTION OUTSIDE INDIAN AREA.—The late Dr. Horsfield obtained specimens (identical with Indian and Burmese examples) in Java (Catal. Lep. Mus. E. I. C. i. 217).

LETHE HYRANIA (Plate 85, figs. 1, 1a, b, c, ♂ ♀).

Satyrus Hyrania, Kollar, in Hügel's Reise Kaschmir, iv. pt. 2, p. 449, pl. 17, figs. 1, 2 (1844), ♂.

Lethe Hyrania, Butler, Catal. Satyr. Brit. Mus. p. 116 (1868). Marshall and de Nicéville, Butt. of India, etc. i. p. 154 (1883).

Elwes, Trans. Ent. Soc. Lond. 1888, p. 309.

Satyrus Isana, Kollar, in Hügel's Reise Kaschmir, iv. pt. 2, p. 448, pl. 16, figs. 3, 4 (1844), ♀.

Lethe Dinarbas, De Nicéville, Journ. As. Soc. Beng. 1886, p. 250, pl. xi. fig. 4, ♀ (*nec Hewitson*).

IMAGO.—Male. Upperside dark olivescent ochreous-brown, somewhat glossy; marginal lines dusky-brown. Cilia brownish-cinereous. *Forewing* crossed by a very indistinct straight oblique discal paler posteriorly-decreasing band, which has its inner edge more sharply defined; beyond is an oblique slender pale ochreous subapical spot traversed by the subcostal veinlets, and below which is sometimes visible, one, two, or even three small round blackish submarginal spots. *Hindwing* with five submarginal black spots, the upper first more or less indistinct; the second usually the largest and oblong, the third smallest, the fifth white pupilled, and all indistinctly pale ringed. Underside paler; marginal lines distinct and pale bordered. *Forewing* with two short transverse dark brown lines within the cell; an oblique transverse discal somewhat sinuous dark brown line, with broad pale brownish-white outer border posteriorly decreasing to the middle of the wing; a pale trifid subapical spot, below which are three equal-sized cinereous-brown ocelli, each with a minute white pupil and all encompassed by a similar coloured border. *Hindwing* crossed by a dark brown subbasal nearly straight line and an irregular undulated discal line; discocellular veinlet also dark brown; beyond are six prominent black ocelli, the upper first and the fifth the largest, the sixth duplex, each with a white pupil, an ochreous ring, then a dark brown ring, and an outer pale greyish-brown ring.

Female. Upperside somewhat paler olivescent-brown, the apex of forewing dusky brown. *Forewing* crossed by a broad conspicuous white oblique discal band, which is traversed by the brown veins, and terminates in a small spot at the posterior angle; a subapical small white oblique spot cut by the subcostal veinlets. *Hindwing* as in the male, except that the submarginal spots are more prominent, larger

and more distinctly ochreous bordered. Underside with the oblique white band and small subapical spot, as on upperside, the white band sometimes slightly bulged out on the middle of its inner edge, the band also broadly edged interiorly with bright dark brown; the three submarginal ocelli as in the male. *Hindwing* with the subbasal and discal transverse line, as in male, bright dark brown; ocelli and marginal lines also as in male. *Body* beneath, legs, and sides of palpi pale brownish-ochreous; antennæ with prominent black terminal band.

Expanse, ♂ $2\frac{2}{8}$ to $2\frac{4}{8}$, ♀ $2\frac{2}{8}$ to $2\frac{3}{8}$ inches.

HABITAT.—N. W. Himalayas.

DISTRIBUTION AND HABITS.—Baron von Hügel obtained the male and female at “Simla and Masuri.” Col. A. M. Lang (Ent. Mo. Mag. 1864, 181) says this insect “frequents a region about 200 miles from Kasauli, in damp glens, where tall rocks cast a shadow all day, this insect is to be found pitched on the rocks or at their foot, or in the rank vegetation near, but never seeks the broad sunshine.” “Both sexes were taken by Col. Lang at an elevation of 7000 feet, at Masuri, in June, and in Lower Kunawur” (Butt. of India, i. 155). Capt. H. B. Hellard (MS. Notes) records it from Simla and Masuri, at end of June and beginning of October.” “Major C. T. Marshall obtained numerous males in May in Chumba, and both sexes were taken by Capt. A. G. Young in Kulu from May to July, also the male only by Mrs. Deane in Chini in June” (Butt. of India, 155). The Rev. J. Hocking (P. Z. S. 1882, 235) records specimens from the Kangra District, N. W. Himalayas. Mr. W. Doherty (J. A. S. Bengal, 1886, 115) obtained it in “Kumaon generally at 3000 to 7000 feet.”

LETHE DINARBAS (Plate 85, figs. 2, 2a, b, ♂ ♀).

Debis Dinarbas, Hewitson, Exotic Butterflies, iii. p. 77, *Debis* pl. 3, fig. 15 (1863), ♂. Butler, Catal. Satyr. Brit. Mus. p. 117 (1868). Marshall and de Nicéville, Butt. of India, i. p. 155, (1883). Elwes, Trans. Ent. Soc. Lond. 1888, p. 309.

IMAGO.—Male. Upperside darker brown than in *L. Hyrania*, and of a more vinaceous tint. *Forewing* crossed by a similar but narrower pale-bordered oblique discal dusky-brown line, which is somewhat excurved; subapical pale spot and lower black spots similar. *Hindwing* with more prominent submarginal black spots. Underside darker than *L. Hyrania*. *Forewing* with similar markings; the oblique discal line somewhat excurved, its upper outer border, the interspace between the cell streaks, and borders of the ocelli being vivid purplish-grey. *Hindwing* with a similar but darker subbasal and discal line, and more prominent ocelli, the interspace between the subbasal and discal line washed with purplish-grey, and the outer borders of the ocelli vivid pale purplish-grey.

Female. Upperside brighter coloured than *L. Hyrания*, and of a more ochreous-brown tint. *Forewing* with the oblique transverse discal band narrower, ochreous-white in tint, almost broken by the middle median veinlet and terminating in a small spot just below the submedian vein; subapical oblique spot more distinct and with an accompanying lower pale spot. *Hindwing* with the submarginal spots larger, blacker, and with brighter ochreous outer rings; the marginal lines more ochreous. Underside similar to *L. Hyrания*; the interspace between the cell streaks, the subbasal and discal line, and the bordering of the ocelli on both wings more vividly pale purplish-grey. *Forewing* with the ocelli well formed and with ochreous irides; the oblique discal band much narrower and ochreous-tinted posteriorly. *Hindwing* with the discal bright brown line having a brown point projecting between the lower radial and upper median veinlet; the ocelli conspicuously larger than those in *L. Hyrания*.

Expanse, ♂ $2\frac{1}{2}$ to $2\frac{2}{3}$, ♀ $2\frac{1}{2}$ to $2\frac{3}{4}$ inches.

HABITAT.—Sikkim; Bhotan; Naga Hills; Khasia Hills.

DISTRIBUTION.—“Not uncommon in the virgin forests of Sikkim, from 7000 to 9000 feet, between June and November” (Elwes, Tr. Ent. Soc. 1888, 314). Mr. O. Möller obtained it in Sikkim in August. Mr. L. de Nicéville (J. A. S. Beng. 1883, 93) records the capture of “a male on Senchal, at 7000 feet, in October.” Specimens were taken in Buxa, Bhotan, by Mr. Knyvett’s native collectors (De Nicéville, J. A. S. Beng. 1886, 250). Major Godwin-Austen obtained it in the Khasia Hills. Specimens from the Khasia Hills are in the collection of Colonel C. Swinhoe. It was taken by Mr. W. Doherty in the “Naga Hills, 5000 to 7000 feet, from June to September” (P. Z. S. 1891, 264).

LETHE BRISANDA (Plate 85, figs. 3, 3a, ♂ ♀).

Lethe Brisanda, De Nicéville, Journ. Asiatic Soc. Bengal, 1886, p. 249, pl. xi., fig. 13, ♀; *id. Proc. Zool. Soc. Lond.* 1887, p. 451, pl. 39, fig. 8, ♂.

IMAGO.—Male. Upperside castaneous-brown. *Forewing* crossed by an indistinct slightly-oblique discal pale outer-bordered dusky sinuous line, beyond which is a pale costal spot, and below the latter are three of the small blackish ocelli of the underside indistinctly visible. *Hindwing* with six submarginal indistinct blackish pale-bordered ocellated spots, the upper second being most distinct and blackest, the lower fourth and fifth with a slight white pupil; a marginal pale line with dusky inner border. Underside paler brown; both wings crossed by a dark brown subbasal line, and an outer short line crossing the cell of forewing with an intervening lilac band. *Forewing* with an oblique discal narrow straight lilac band of equal width throughout its length; beyond are four small black ocelli, each with a white pupil,

a brown and a ferruginous ring, and then an outer pale ring; marginal line pale bordered. *Hindwing* with a transverse discal dark brown line acutely angulated on the median veinlets, followed by a series of six prominent ocelli, each with a black centre and white pupil, an ochreous, then a dark brown, and an outer violaceous ring.

Female. "Upperside castaneous. *Forewing* with rather more than the outer half fuscous, crossed from the middle of the costa to near the anal angle by a decreasing white band, which is tinged with ochreous anteriorly, its inner edge very straight and sharply defined, its outer edge less regular and blurred; two small ochreous subapical spots divided by the fifth subcostal nervule. *Hindwing* with the outer half fuscous, bearing a submarginal series of four black spots placed upon a castaneous band, the upper one large and round, the second somewhat quadrate and extending to the inner of the two pale marginal fine lines, the third and fourth small and oval; there are faint traces also of a spot in the discoidal and a geminated one in the submedian interspace. Underside pale ochreous-brown. *Forewing* with two ferruginous fine lines crossing the middle of the cell, the discal band as above but somewhat lengthened posteriorly, the ground colour within it somewhat darker than the rest of the wing; a submarginal series of four small perfect ocelli, made up of a white pupil, a black ring, a ring of the ground colour, a ferruginous ring, and an outer pale ring; two fine dark marginal lines. *Hindwing* with two discal fine irregular ferruginous lines from the costa to the submedian veinlet, the lower discocellular veinlet ferruginous; a submarginal series of six perfect ocelli, made up of a black white-pupilled centre, an ochreous ring, a dark brown ring, and then an outer violaceous ring, the upper ocellus much the largest, the second and fourth subequal, as are also the third and sixth, which are the smallest, the latter twinned; two fine dark marginal lines inwardly defined by a pale violet line and enclosing a fine ochreous line. *Cilia* pale brown throughout."

Expanse, ♂ $2\frac{2}{8}$, ♀ $2\frac{3}{8}$ inches.

HABITAT.—Buxa, Bhotan.

The male differs above from Sikkim specimens of *L. Dinarbas* in the decidedly less obliquity of the pale-bordered discal line of the forewing, and "on the underside of the forewing in the lilac band across the cell being much narrower, with uneven instead of straight edges; the discal oblique band lilac throughout, straight, and of equal width throughout (in *L. Dinarbas* the upper portion of the band only is lilac, this portion too in that species being wider); in having an additional ocellus in the subcostal interspace (in *L. Dinarbas* there are always three ocelli only). On the hindwing the discal bands are deep brown instead of ferruginous, and the lilac washings throughout much more brilliant. The female differs from the same sex of *L.*

Dinarbas on the upperside, in having the ground colour castaneous instead of pale brown, the discal band straighter and better defined; the ocelli on the hindwing smaller and blind. On the underside the ground colour in *L. Brisanda* is ochreous, in *L. Dinarbas* it is pale brown washed with violescent; the forewing has four ocelli owing to the discal band being narrower, in *L. Dinarbas* there are three only; on both wings in the latter the discal narrow lines are dark brown instead of ferruginous and broader and more regular."

A male and female obtained near Buxa, Bhotan, by Mr. A. V. Knyvett's native collectors. *L. Dinarbas* also occurs at Buxa.

The illustrations of this species on our Plate No. 85, fig. 3, represent the male type, kindly lent by Mr. H. J. Elwes, and fig. 3a, the female, reproduced from Mr. L. de Nicéville's figure of the type specimen.

INDO-MALAYAN AND ALLIED SPECIES OF LETHE.—*L. Arete* (Cramer, Pap. Exot. iv. pl. 313, figs. E.F. (1782). Both sexes of this species are in our own collection. *Habitat.* Amboina.—*L. Arcuata*, Butler, Catal. Satyr. Brit. Mus. p. 114, pl. 2, fig. 3 (1868), ♂. Quite a distinct species from *L. Arete*. Both sexes are in our own collection. *Habitat.* Celebes.—*L. Darena*, Felder, Reise Nov. Lep. iii. p. 498, pl. 68, fig. 4, 5 (1867). *Habitat.* Java.—*Lethe Whiteleyi*, Butler, Ann. Nat. Hist. 1867, p. 403, pl. 9, fig. 8. *Habitat.* Japan.—*L. Diana*, Butler, Journ. Linn. Soc. 1866, p. 55, id. Ann. N. H. 1867, pl. 2, fig. 2. Oberthür, Etudes Ent. vi. p. 16, pl. 7, fig. 2, ♀. *Habitat.* Japan; China; Corea.—*L. consanguis*, Butler, Ann. Nat. Hist. 1881, p. 133. *Habitat.* Japan.—*L. procris*, Leech, Entomologist, 1891, p. 2. *Habitat.* W. China.—*L. Baucis*, Leech, Entomologist, 1891, p. 3. *Habitat.* W. China.—*L. Syrcis*, Hewitson, Exot. Butt. iii. Debis pl. 3, figs. 13, 14 (1863). Oberthür, Etudes Entom. vi. pl. 7, fig. 3 (1881). *Habitat.* China.—*L. occulta*, Leech, Entomologist, 1890, p. 28. *Habitat.* W. China.—*L. labyrinthea*, Leech, id. p. 28. *Habitat.* W. China.—*L. Helena*, Leech, id. 1891, p. 3. *Habitat.* W. China.—*L. gemina*, Leech, id. 1891, p. 24. *Habitat.* W. China.

The following are allied Chinese forms:—Gen. nov. *Archondesa*. Male. Forewing very short, broad, triangular; costa slightly arched, apex obtuse, exterior margin slightly oblique and hardly concave, posterior angle obtuse; cell moderately narrow, extending to half the wing. Hindwing broad, short, somewhat triangular; exterior margin oblique and produced posteriorly, abdominal margin long; cell narrow and long. Palpi compactly clothed in front with short thick-set hairs, apical joint short, obtuse; antennæ very long, with an elongated imperceptibly thickening club. Type *A. lanaris* (*Lethe lanaris*, Butler, Ann. Nat. Hist. 1877, p. 95). *Habitat.* China.—Gen. nov. *Choranesa*. Male. Forewing narrow, subtriangular; costa slightly arched, apex obtuse, exterior margin even, posterior angle rounded; cell broad, extending to half the wing. Hindwing bluntly ovate; exterior margin convex and very slightly angular at end of the upper median veinlet;

abdominal margin long; cell long, narrow; discocellulars long, very oblique. Palpi short, porrect, clothed with short dense velvety hairs; apical joint pointed; antennæ with a well-formed blunt-tipt club. Type *C. trimacula* (Lethe trimacula, Leech, Entomologist, 1890, p. 27). *Habitat.* W. China. This latter species is here placed near *Debis* with doubt; its pattern above is peculiar, and that on the underside of the hindwing is very different; there are also seven ocelli present, the two upper being geminated.

Genus DIONANA.

IMAGO.—Male. Wings large. *Forewing* triangular; costa much arched, apex obtusely pointed, exterior margin oblique, slightly wavy, posterior angle rounded, posterior margin straight; cell short, less than half length of the wing, broad; first and second subcostal branches emitted before end of the cell; discocellulars outwardly-oblique, upper short and angled close to subcostal, concave below the angle, radials from the angles; median branches equidistant apart. *Hindwing* broadly ovate, costa arched in the middle, apex rounded, exterior margin convex, sinuous, broadly angular at end of middle median veinlet; cell broad, fusiform; first subcostal branch emitted at nearly one-third before end of cell; discocellulars long, outwardly-oblique, radial from the middle; two upper medians from end of the cell, lower at about one-fourth before the end. *Thorax* stout, densely hairy; palpi narrow, hairy in front, apical joint short, slender; legs rather long, stout, middle and hind femora slightly hairy beneath; antennæ long, with elongated very slender club; eyes hairy.

Type.—D. Margaritæ.

DIONANA MARGARITÆ (Plate 86, figs. 1, 1a, b, ♂ ♀).

Lethe Margaritæ, Elwes, Proc. Zool. Soc. 1882, p. 405, pl. 25, fig. 1, ♂.

Neorina Margaritæ, Marshall and de Nicéville, Butt. of India, etc. i. p. 136, ♂. Elwes, Trans. Ent. Soc. Lond. 1888, p. 307.

IMAGO.—Male. Upperside olivescent ochreous-brown; marginal lines blackish, ochreous bordered; cilia pale ochreous. *Forewing* crossed by an ochreous-yellow oblique discal narrow band, which terminates just below the lower median veinlet, is crossed by brown veins, and slightly sinuous anteriorly on its outer edge; beyond is a subapical series of four ochreous-ringed black spots and a contiguous upper costal ochreous spot. *Hindwing* with a submarginal series of five large black ocelli, each with a narrow ochreous ring, and the two lower with a white pupil. Underside paler, but brighter olivescent ochreous-brown; marginal lines pale olivescent-ochreous bordered. *Forewing* with the oblique discal band more prominent and paler yellow; there are five prominent submarginal ocelli, each with a small black centre, a white pupil, a yellow ring, then a brown ring, and all encompassed within an outer yellow band. *Hindwing* crossed by a slightly-

incurved moderately broad yellow discal band, and a submarginal series of six very prominent ocelli, of which the upper is very large, the fifth also large, the sixth duplex, each with black centre, a white pupil, ochreous-yellow ring, then a dark brown ring, the upper one being encircled by an outer yellow ring, and the others encompassed by a yellow outer ring.

Female. Upperside darker brown. *Forewing* crossed by a much broader and more oblique paler yellow band, which also broadly extends to the posterior margin just before the angle; the ocelli and contiguous costal spot present but much less defined. *Hindwing* marked as in the male, the ocelli being somewhat larger and the exterior margin with a broader and more pointed angle at end of the middle median. Underside of the same colour as in the male; marginal bordered-lines the same. *Forewing* with the oblique pale yellow band as on upperside; five ocelli as in the male, and the middle of the cell is crossed by a narrow pale yellow band. *Hindwing* with the yellow transverse discal band and ocelli as in the male. *Body* beneath and legs pale brownish-ochreous; legs paler beneath; palpi at the sides pale ochreous; antennæ reddish-ochreous, with black subterminal band.

Expanse, ♂ $3\frac{2}{3}$, ♀ $3\frac{3}{5}$ inches.

Habitat.—Bhotan.

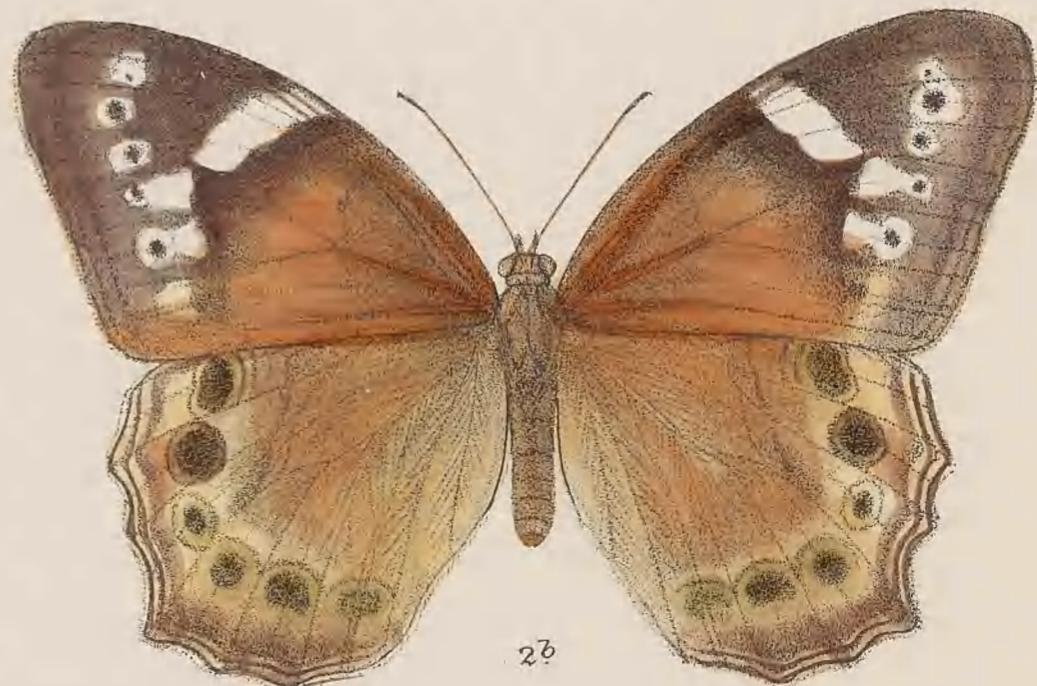
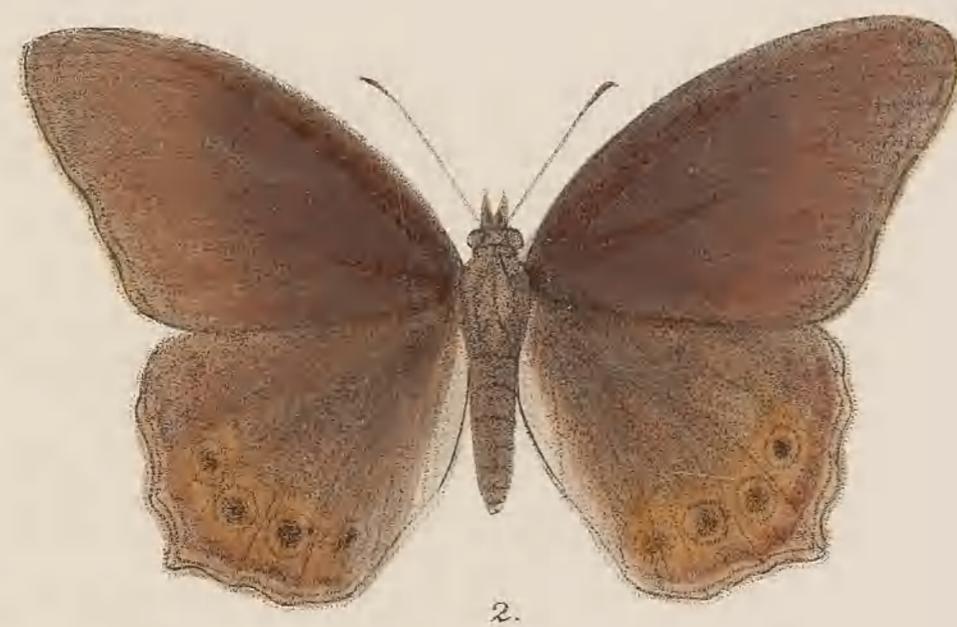
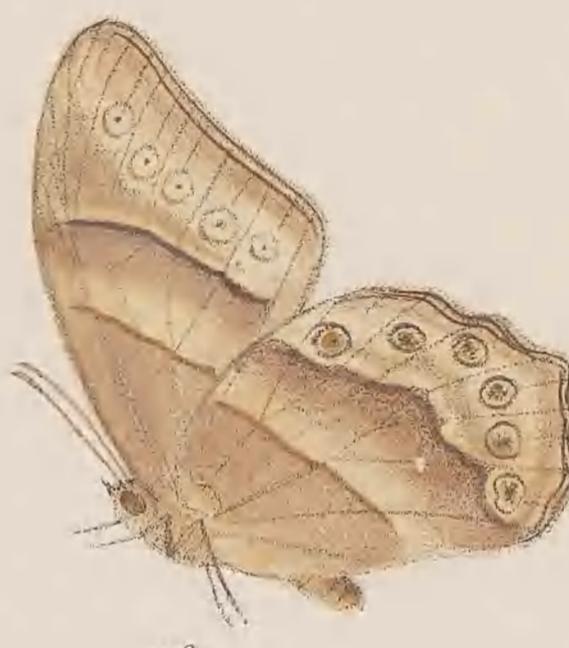
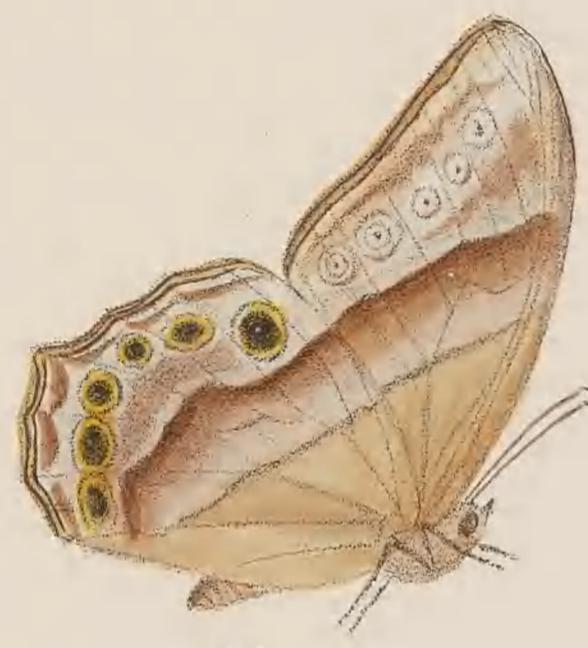
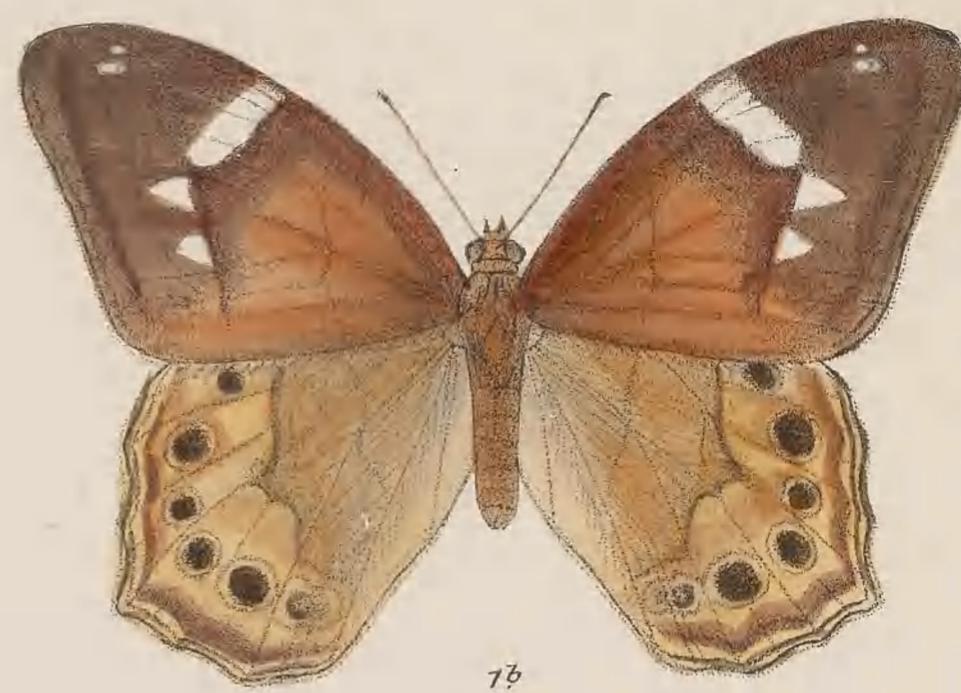
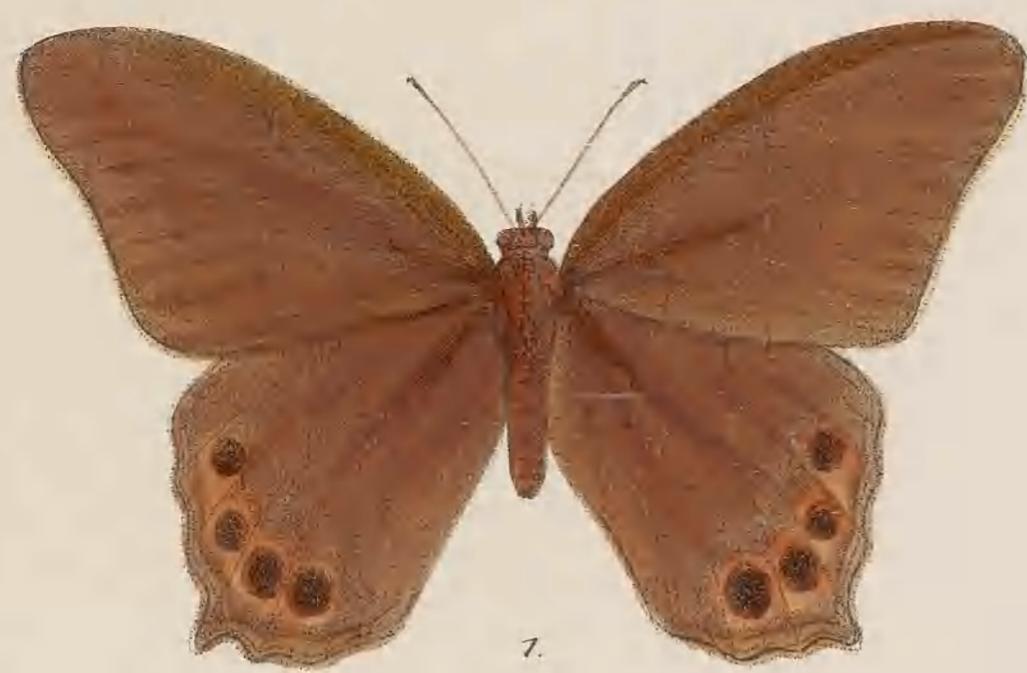
This beautiful species was obtained by Mr. Knyvett's native collectors near Buxa, in Bhotan.

Our illustrations of this species on Plate No. 86, figs. 1, 1a, b, represent the male and female, from the type specimens kindly lent for this purpose by Mr. L. de Nicéville and Mr. H. J. Elwes.

DIONANA NAGA (Plate 86, fig. 2, ♀).

Lethe Naga, Doherty, Journ. Asiatic Soc. Bengal, 1889, p. 123, pl. x. fig. 4, ♀.

“*Female.* Upperside dark fuscous. *Forewing* with a broad white oblique band from the costa (near which it is broader and whiter) to the submedian, above which it is suddenly bent downwards, passing close by the end of the cell but not touching it, its inner border distinct, its outer diffused. *Hindwing* with two pale submarginal lines, the ocelli showing through the wing, especially the white pupil of the fifth. Underside uniform light fuscous-brown with a slight bronzy lustre. *Forewing.* Base unmarked except by a very obscure darker line across the cell, the white band as above, two straight pale submarginal lines, and five perfect subequal ocelli ringed with pale violet, set in nearly a straight line between the lower median and the lower subcostal branch. *Hindwing* with two irregular transverse darker lines placed unusually close together, and enclosing a narrow space obscurely glossed with violet. These lines originate below the costal vein, the inner crossing the cell





1.



7a



2a



7b



2.



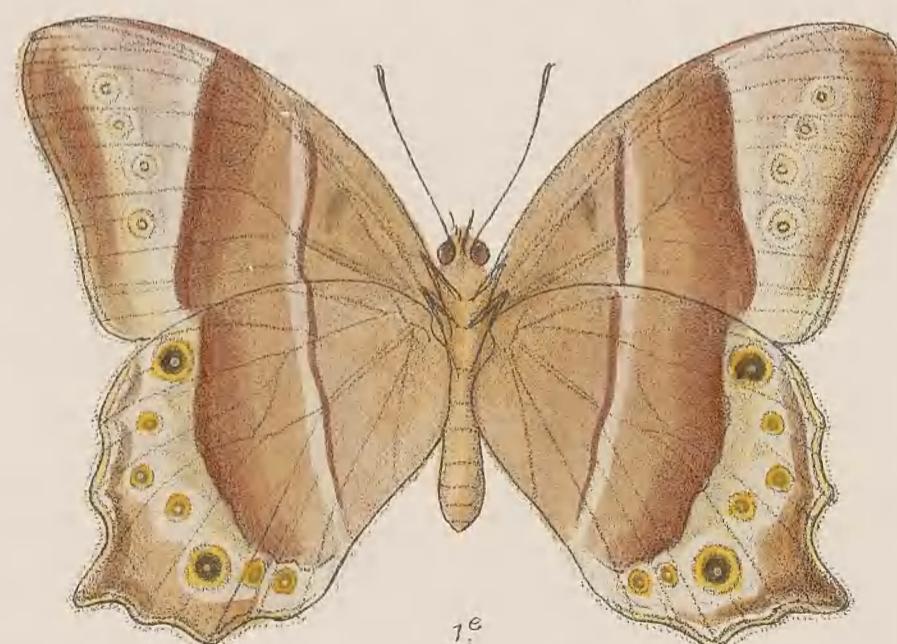
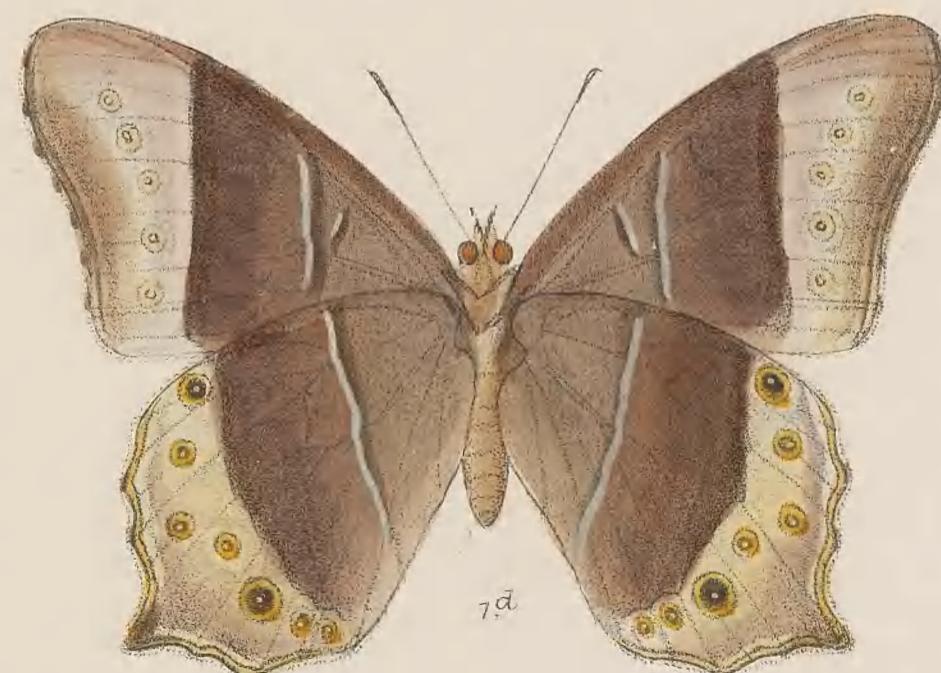
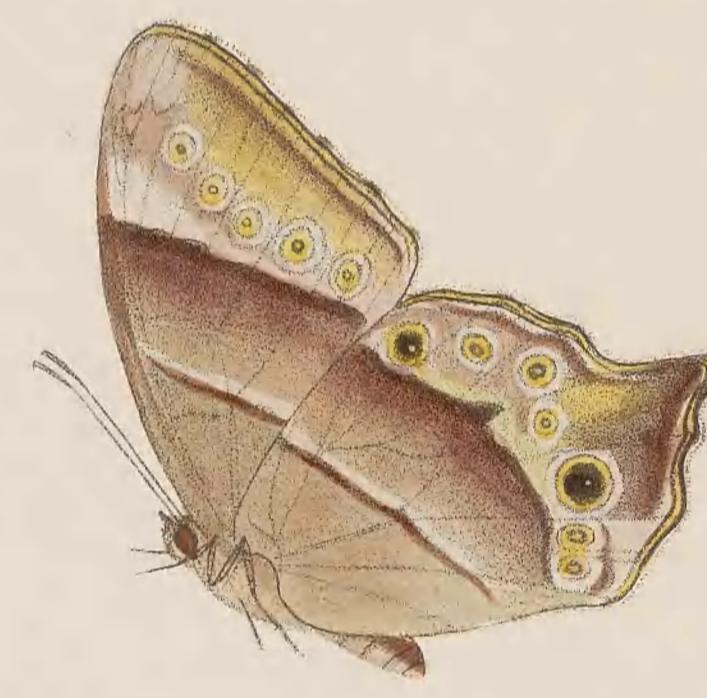
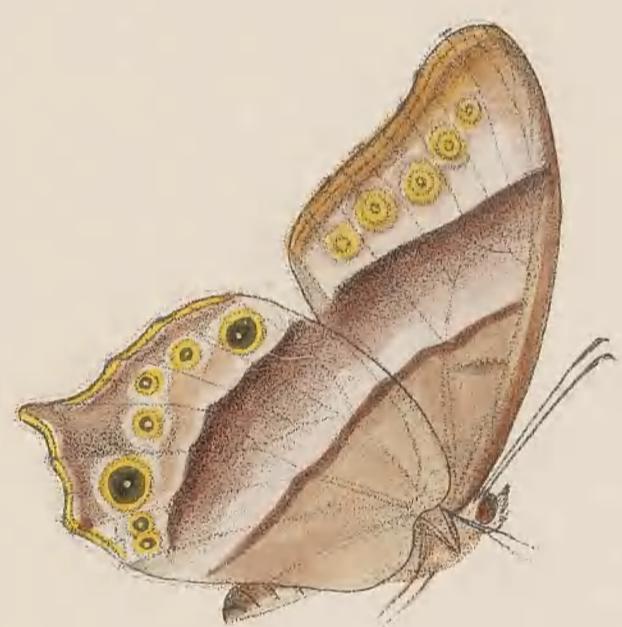
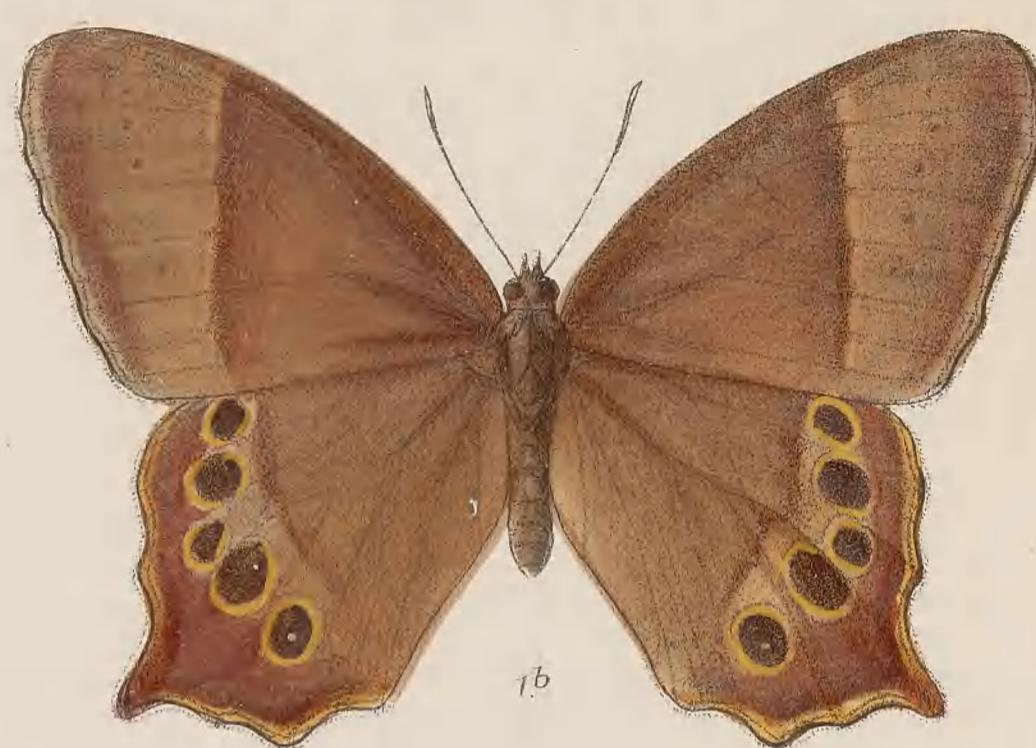
3a

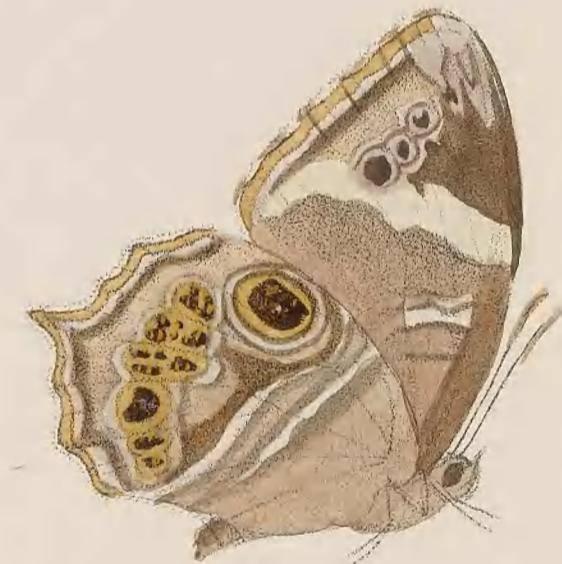
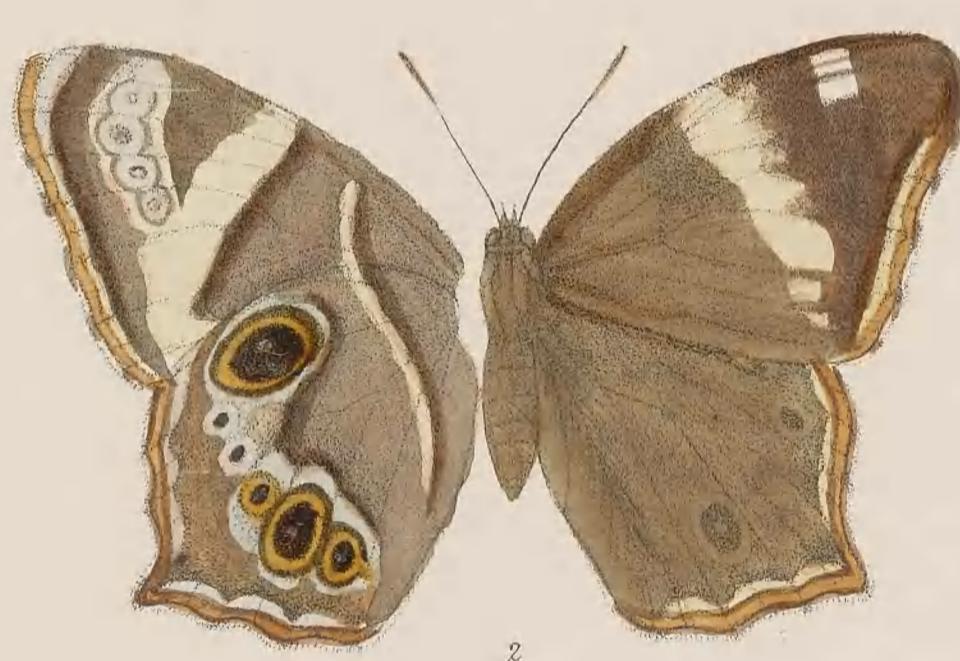
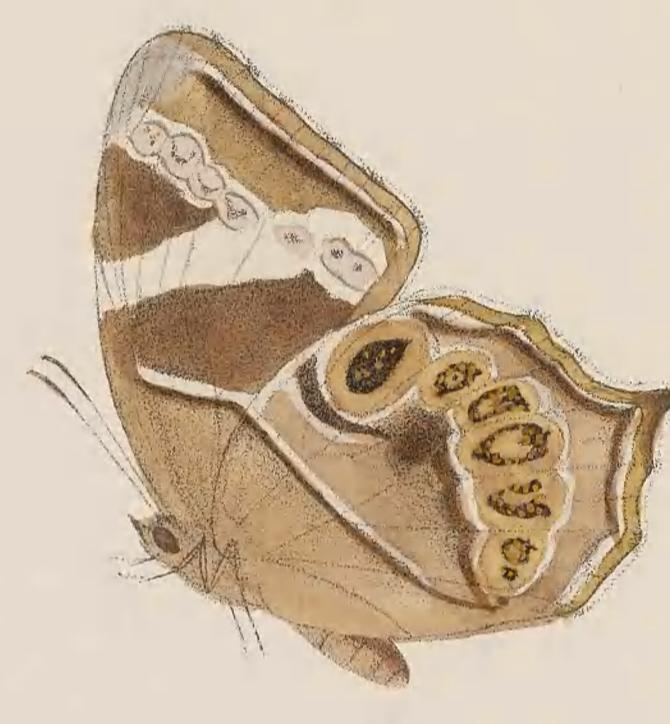
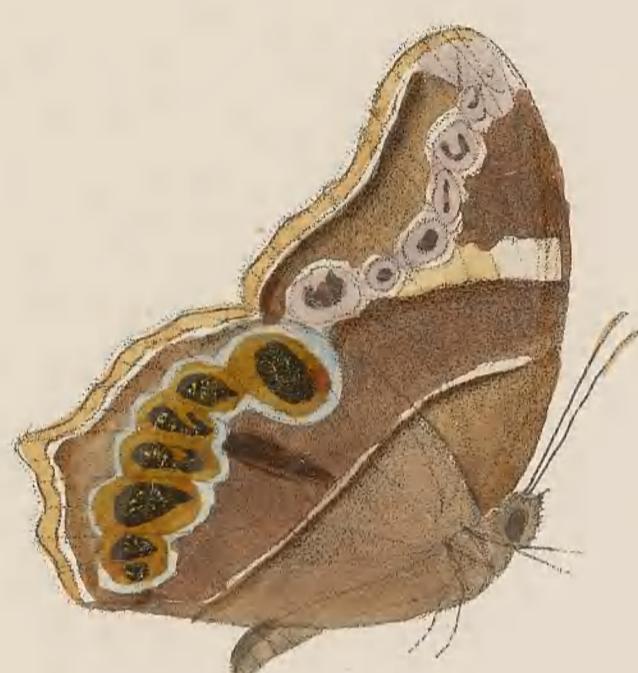


3.



3b





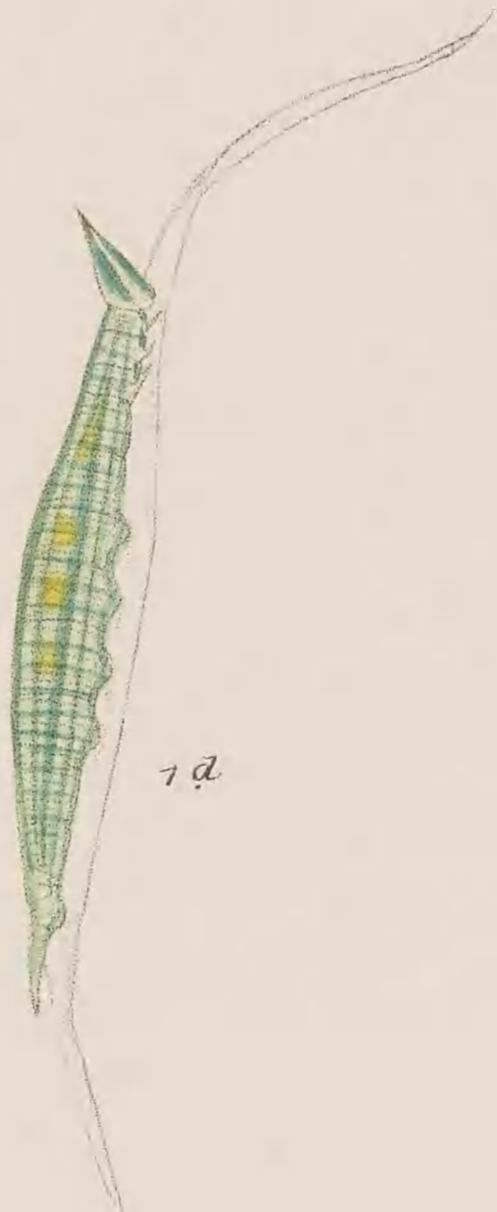


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