Zeitschrift:	Entomologica Basiliensia
Herausgeber:	Naturhistorisches Museum Basel, Entomologische Sammlungen
Band:	5 (1980)
Artikel:	Coleoptera: Fam. Oedemeridae
Autor:	Švihla, V.
DOI:	https://doi.org/10.5169/seals-980734

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# Ergebnisse der Bhutan-Expedition des Naturhistorischen Museums in Basel

# Coleoptera: Fam. Oedemeridae

#### by V. Švihla

Abstract: Five species of the family Oedemeridae are recorded for the first time from Bhutan. The following species are described as new to science: Xanthochroa brachyptera n.sp. (Bhutan), Chrysanthia bhutanica n.sp. (Bhutan) and Ch.wittmeri n.sp. (Kashmir). Indasclera n.gen. is proposed for Asclera indica Fairm. (type species) and two new species: Indasclera obscura n.sp. (Bhutan) and I.himalaica n.sp. (Northern India). Ascleropsis excellens Fleisch. is synonymised with I.indica (Fairm.). Chrysanthia species of the Indian subcontinent are revised and a key is given.

Dr. W. Wittmer has kindly let me study the material of the family Oedemeridae collected by the Expedition of the Naturhistorisches Museum, Basel (=NHMB) to Bhutan in 1972. This material comprises 5 species. All are new to the fauna of Bhutan and 3 are new to science. Two further species from the Indian subcontinent are also described.

This work was accomplished through the assistance of Mrs. E.R. Peacock and Mr. M. J.Brendell (British Museum of Natural History, London = BMNH), Dr. C. Girard (Muséum d'Histoire naturelle, Paris = MHN) and Dr. J. Jelínek (Národní Museum, Praha = NMP), to all of whom I am indebted for the loan of the types and other material.

#### List of Oedemeridae from Bhutan:

#### 1. Xanthochroa brachyptera n. sp.

Nobding 41 km O, Wangdi Phodrang, 2800 m, 17.–18. VI. 1972, 4 ex.; Sampa-Kotoka, 400–2600 m, 9. VI. 1972, 1 ex.

### 2. Xanthochroa grandis Pic, 1923

km 87 von Phuntsholing, 22.V.1972, 7 ex. Described from India without precise data.

#### 3. Indasclera indica (Fairmaire, 1894)

km 87 von Phuntsholing, 22. V. 1972, 7 ex.; Wangdi Phodrang-Dorjula, 26. VI. 1972, 1 ex.; Tangu, 2700 m, 27 km N Thimphu, 30. VI. 1972, 3 ex.; Nobding 41 km O Wangdi Phodrang, 2800 m, 3 ex.; Chimakothi 22. V. 1972, 1 ex.; Chasilakha, 6425 ', 1978, Dorjee Khandu, 19 ex. Described from India (Kurseong-Darjeeling distr.)

## 4. Indasclera obscura n.sp.

Chimakothi, 22. V. 1972, 1 ex.

## 5. Chrysanthia bhutanica n. sp.

Thimphu, 31.V.1972, 12 ex.; Thimphu VI.1975, 1 ex.; Gidaphu, 2300 m, 2.VI.1972, 2 ex.; Paro, 2700 m, Tak San, 3.V.1972, 1 ex.; Chimakothi, 22.V.1972, 1 ex.

## Xanthochroa brachyptera n.sp. Figs 1-4

Male. Head black, clypeus, mouth parts and vertex near pronotum yellowish-brown; sparsely and finely punctate, very sparsely pubescent. Last joint of maxillary palpi slightly triangular (Fig. 4). Eyes large, vaulted, situated obliquely to longitudinal axis of the head, their anterior margin widely emarginate. Antennae inserted in this anterior emargination of the eyes. The front between antennal pits slightly narrower than between the eyes. Head, including the eyes, wider than pronotum. Antennae long, reaching almost up to the apex of elytra, brown, the first three joints brownish-black. The first joint more than twice as long as the second, the third equally long as the first, subsequent joints gradually shorter.

Pronotum orange-yellow, as long as wide, sparsely and finely punctate, sparsely pubescent. Pronotum is widest at ¼ of its lenght, posteriorly slightly narrower than forward edge. Scutellum yellow, triangular, apically emarginate.

Elytra dark blue, finely corrugated, shortly brown pubescent; basally almost twice as wide as posterior part of pronotum and three times longer than wide, each elytron broadly rounded at the apex. Four costae are visible on each elytron, the third of which is very indistinct (visible only in the middle part of elytron). Wings shortened. Legs long, dark brown. Ventral surface of thorax brownish-yellow, abdomen blackishbrown. Last abdominal segment, apical part of the IX. urite and apical part of phallus as figured (Figs 1–3).

Female. Eyes smaller than in male, last joint of maxillary palpus not so distinctly triangular, antenna shorter, only slightly exceeding half the length of elytra. Elytra broader posteriorly (widest at <sup>3</sup>/<sub>4</sub> of their length), shortened, not covering last abdominal segment. Last tergite hardly exceeding the last sternite, both very shallowly arcuately emarginate. Length  $\Im$ : 13.0-14.0 mm.

Holotype: &, Bhutan: Nobding 41 km O, Wangdi Phodrang, 2800 m, 17.–18. VI. 1972, Paratypes: the same locality and data, 1 & 2 ??; Sampa-Kotoka, 1400–2600 m, 9. VI. 1972, 1 &. Holotype and paratypes in Naturhistorisches Museum, Basel, two paratypes in author's collection.

It is according to its colouration most similar to Xanthochroa fuscipennis Champion, 1927 from Northern India, from which it differs by the following characters:

#### X. fuscipennis Champ.

#### X. brachyptera n. sp.

Projections of the IX.urite turned ♂♂ inwards.

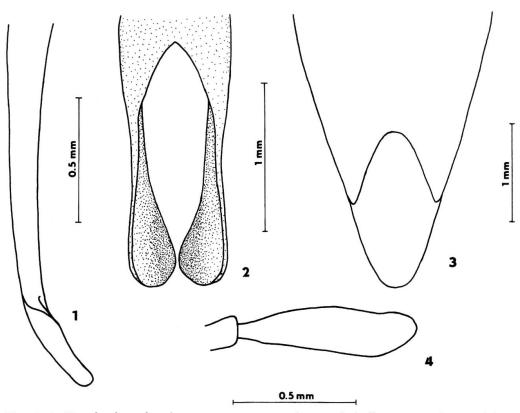
Phallus very wide, its apex turned down. Last joint of maxillary palpi triangular.

Elytra not shortened, parallel-sided.

Projection of the IX. urite straight, spoon-shaped, concave. Phallus slender, its apex turned up.

Last joint of maxillary palpi almost parallel-sided.

99 Elytra shortened, slightly broader posteriorly.



Figs 1–4: Xanthochroa brachyptera n. sp.: 1, apical part of phallus. 2, apical part of the IX. urite. 3, last abdominal segment, ventral view. 4, last joint of male maxillary palpus.

#### Indasclera n.gen.

Type species: Asclera indica Fairmaire, 1894 (by the present designation).

Head wide, eyes small but vaulted, head behind the eyes narrowed, together with eyes as wide or wider than pronotum. Eyes situated obliquely to longitudinal axis of the head, on the anterior margin emarginate, antennal pit as far from the eyes as the width of the base of the first antennal joint. Head between the eyes wider than between antennal pits, in front of eyes short. Labrum wider than long, mandibles bifid at the apex, last joint of maxillary palpi triangular. Antennae 11-segmented, slightly exceeding half the length of the body, their last joint slightly emarginate (in one half or two-thirds of its length).

Pronotum as long or slightly longer than wide, narrowing backwards, slightly cordiform or almost parallel-sided.

Elytra slightly broader towards the apex, rounded or tapered (in I. indica) apically, very finely and densely corrugated, without any visible costae. 2–4 very slight and shallow grooves at the base of each elytron. Legs slender, anterior tibiae with two apical thorns, claws thickened at the base, sometimes, especially in posterior tarsi, slightly dentate. Last tergite in male about 1/3-1/2 longer than last sternite, rounded apically, last sternite rounded or arcuately emarginate in the middle. Last sternite in female only slightly shorter than last tergite, both rounded apically. Tegmen apically very shortly divided, with lateral or ventral projections. Phallus with small hooklets. Both tegmen and phallus well developed basally.

This genus is related to genus Asclera Steph., from which it can be distinguished as follows:

## Key to Asclera and related genera

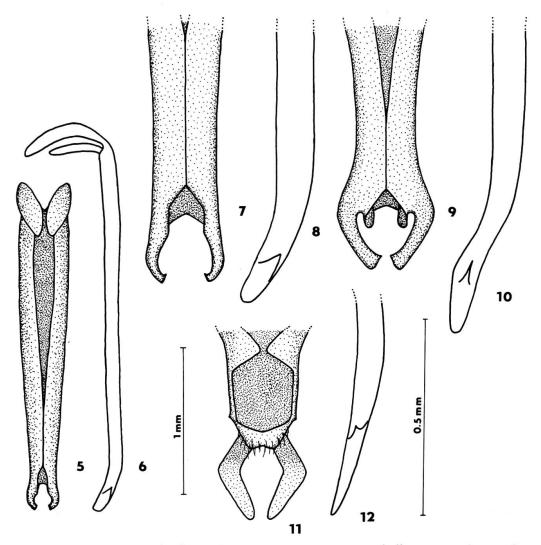
1	Eyes not emarginate on anterior margin	2
_	Eyes emarginate anteriorly	3
2	Last sternite tapered Ascleropsis Seidl.	
_	Last sternite arcuately emarginate in the middle	
	Chrysanthia Schm.	
3	Elytra with more or less distinct costae, last sternite tapered	
	apically, last tergite apically shortly but acutely emarginate,	
	parameres pubescent Asclera Steph.	

 Elytra without any visible costae, last sternite rounded or arcuately emarginate in the middle, last tergite apically rounded, parameres not pubescent
Indasclera n. gen.

Indasclera indica (Fairmaire, 1894) n. comb. Figs 5-8

Asclera indica FAIRMAIRE, 1894: Ann. Soc. ent. Belg., 38: 42 Ascleropsis excellens FLEISCHER, 1919: Ent. Bl., 15: 168, n. syn.

I have had the opportunity to study the type material of Ascleropsis excellens Fleisch., deposited in Národní Museum, Praha. This material contains 3 specimens (all females), labeled "Asia Minor". The speci-



Figs 5–12: Figs 5–8: Indasclera indica (Fairm.): 5, tegmen. 6, phallus. 7, apical part of tegmen. 8, apical part of phallus. Figs 9–10: Indasclera himalaica n. sp.: 9, apical part of tegmen. 10, apical part of phallus. Figs 11–12: Indasclera obscura n. sp. 11, apical part of tegmen. 12, apical part of phallus.

mens are identical with the specimens from India and Bhutan and it seems evident that their locality is wrong.

Other material examined (apart from the material from Bhutan, mentioned above): India: Darjeeling Distr.: Darjeeling, 2150 m, 26. V. 1975, W. Wittmer, 1 ex., Jhepi, 17. V. 1975, W. Wittmer, 1 ex.; Shepkola (P.O.Ryang), 1500 m, 2. V. 1976, W. Wittmer, 1 ex.; Lopchu, 3. V. 1976, W. Wittmer, 1 ex. (all NHMB); Darjeeling Hills, 6–8,000 ft, VI. 1934, H.G. Champion, 1 ex.; Nurbong Bw., 2,050 ft, 1914, H. Stevens, 1 ex.; Darjeeling, 1904, R. P. Verschraeghen, 2 ex. (all BMNH); Kurseong, 3,600 ft, V. 1912, P. Newton, 1 ex. (NMP).

Indasclera himalaica n. sp. Figs 9–10

Male. Head greenish-blue, anteclypeus, labrum, tips of mandibles, maxillary palpi and antennae brown. Surface of head finely and densely punctate, densely yellow pubescent. Eyes situated obliquely to longitudinal axis of head, emarginate on anterior margin before antennal pits; head including eyes as wide as pronotum. Last joint of maxillary palpi securiform. Antennae reaching to the mid-point of elytra, the first joint somewhat longer than the second, the third two-times longer than the second, following joints gradually shorter, last joint slightly emarginate at its mid-point.

Pronotum orange-yellow with wide median, longitudinal, green stripe, very finely corrugated and very sparsely punctate, glabrous; slightly longer than wide, cordiform, with two shallow depressions before the middle. Scutellum quadrate, black.

Elytra greenish-blue, very densely and finely corrugated, densely punctate and yellow pubescent, without visible costae. Legs black, abdomen greenish-blue. Last tergite apically rounded, twice the length of the last sternite, which is apically rounded with very small and shallow emargination in the middle. Apical part of the IX. urite visible, brown. Phallus and tegmen as figured (Figs 9–10).

Female unknown.

Lenght: 9.6 mm.

Holotype: &, India: Darjeeling Distr., Rimbick-Raman, 1950-2450 m, 12. V. 1975, W. Wittmer, in Naturhistorisches Museum, Basel.

Related to *I.indica* (Fairm.) from which it differs by the dull head and pronotum and different form of tegmen and phallus.

Indasclera obscura n. sp. Figs 11-12

Male. Head dark blue, anteclypeus, tips of mandibles, maxillary palpi and antennae dark brown. Surface of head very finely and densely corrugated, densely punctate and yellow pubescent. Eyes situated obliquely to longitudinal axis of head, emarginate on anterior margin before antennal pits; head between eyes wider than between antennal pits; including eyes, slightly wider than pronotum. Last joint of maxillary palpi securiform. Antennae reaching slightly beyond mid-point of elytra, the first joint only very slightly longer than the second, third joint twice the length of the second, following joints gradually shorter, last joint only very slightly emarginate at two-thirds of its length.

Pronotum dark blue, very finely and densely corrugated and densely punctate, with yellow pubescence, dull. Form of pronotum very slightly cordiform, almost parallel-sided, as long as wide. Scutellum square-shaped, black.

Elytra dark blue, finely and densely corrugated, but more roughly than head and pronotum, densely yellow pubescent, without any punctures and costae. Abdomen dark blue, legs black. Last tergite by onethird exceeding last sternite, rounded apically, last sternite with narrow, acute, median emargination reaching up to one-fifth of its length, apical part of the IX. urite visible, brown. Phallus and tegmen as figured (Figs 11–12).

Female. Eyes smaller, head including eyes as wide as pronotum, last tergite only slightly exceeding last sternite, both apically rounded.

Length ♂9: 6.2–6.9 mm.

Holotype: &, Bhutan: Chimakothi, 22.V.1972, in Naturhistorisches Museum, Basel; paratype, 9, Nepal: Marsiandi, 6,000 ft, 1949, O.Polunin, in British Museum of Natural History, London.

This species differs from *I. indica* (Fairm.) and *I. himalaica* n. sp. by the entirely dark pronotum and by the different form of phallus and tegmen.

## Key to Indasclera – species

1	Pronotum entirely	dark. Bhutan	i, Nepal	I.o	bscura n. sp.

- Pronotum at least partly red or reddish-yellow .....
- 2 Head and pronotum sparsely punctate, without corrugation, lustrous. Bhutan, N. India I. indica (Fairm.)

2

Head and pronotum densely corrugated, dull. N. India
I. himalaica n. sp.

#### A revision of Chrysanthia-species from Indian subcontinent

Species of the genus *Chrysanthia* Schmidt, 1846, are distributed only in Eurasia and namely in two regions. One of them occupies Europe, the Mediterranean region, Siberia and Japan. The second region embraces India and adjacent regions (Nepal, Bhutan, Pakistan, Kashmir). These two regions of distribution are separated by a zone of steppes and deserts. It is not sure, whether these two distributions are contiguous in the eastern part of Asia (there is no known species from China).

#### 1. Chrysanthia rugicollis Champion, 1920, Fig. 13

Ent. Mon. Mag., 56: 75.

Dorsal and ventral surface of body copperish-green or green, mouth parts yellow, antennae brown, the first three joints yellow, legs yellow, tarsi infuscate. Head punctate as in following species, but spaces between punctures on vertex and on interocular area more coarsely corrugated. Punctures at anterior and posterior margins of pronotum connected by transverse wrinkles. Longitudinal impression along the middle of pronotum, another impression at its base. Elytra corrugated, yellow pubescence longer and more dense than in *Ch.valens* Champ. Posterior coxa in male with a slight projection. Phallus Fig. 13.

Length ♂9: 5.5-8.4 mm.

Material examined: Syntypes: India; Kumaon, W Almora,  $3^{\circ}$ , H.G.Champion (BMNH); West Bhatkoe, Kumaon, 4090', V.1920, H.G.Champion, 5 ex.; Almora, Khaula, 4,500 ft, H.G.Champion, 7 ex.; Haldwani Dist., Kumaon, H.G.Champion, 1 ex.; Parbatti V., Kulu, Punjab, 6–8,000 ft, H.G.Champion, 1 ex. (all BMNH). The male syntype from Kumaon was designated as lectotype, female as paralectotype.

#### 2. Chrysanthia valens Champion, 1920

Ent. Mon. Mag., 56: 75.

Dorsal and ventral surface of body metallic green, mouth parts yellow, antennae brown, the first three joints yellow, legs yellow, tarsi infuscate. Head between the eyes and on vertex sparsely, laterally more densely punctate, spaces between punctures very finely corrugated. The punctures on pronotum not connected by transverse wrinkles. Pronotum with median longitudinal, more sparsely punctate line, at the base with small triangular impression. Elytra corrugated, dense and relatively long yellow pubescence.

Length  $\mathcal{Q}$ : 8.1 mm.

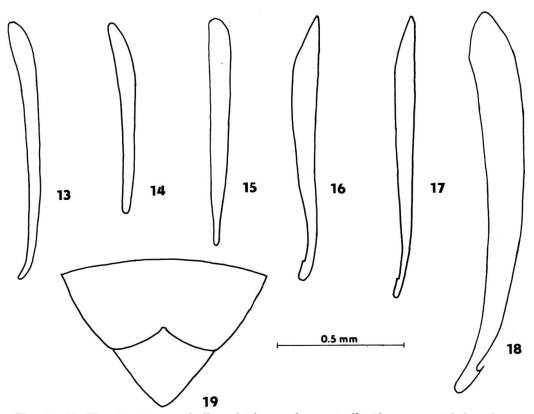
Material examined: Holotype, ♀, India: Kumaon, W.Almora, H.G.Champion (BMNH).

Perhaps only form of preceding species.

3. Chrysanthia himalaica Champion, 1920, Fig. 14

Ent. Mon. Mag., 56: 74.

Dorsal and ventral surface of body green or copperish-green, projections of the IX. urite in male, mouth parts, first three antennal joints



Figs 13–19: Figs 13–18: 13, phallus of *Chrysanthia rugicollis* Champ. 14, *Ch. himalaica* Champ. 15, *Ch. bhutanica* n. sp. 16, *Ch. fuscimembris* Fairm. 17, *Ch. cyanescens* Pic. 18, *Ch. wittmeri* n. sp. 19, *Ch. fuscimembris* Fairm., last abdominal segment of female, ventral view.

and legs yellow, rest of antennal joints and tarsi brown. Head very sparsely (especially on vertex and on interocular area) and shallowly punctate, spaces between puncture very finely corrugated. Pronotum punctate like head, spaces between punctures finely corrugated. Punctures at anterior margin of pronotum are connected by transverse wrinkles. Longitudinal impression in the middle of pronotum, another, deeper, triangular impression is situated at the base. Elytra corrugated, finely and sparsely (more sparsely than in the two preceding species) yellow pubescent. Posterior coxa with small projection in male. Phallus Fig. 14.

#### Length ♂♀: 5.7–7.9 mm.

Material examined: syntypes: India: Kumaon, W.Almora, III. 1917, H.G. Champion, 4 dd 4 Q (BMNH). One male was designated as lectotype, other specimens as paralectotypes.

#### 4. Chrysanthia bhutanica n. sp. Fig. 15

Male. Dorsal and ventral surface of the body metallic green or copper coloured. The metallic colouration on the head reaching to the middle of clypeus, anteclypeus and mouth parts yellow, tips of mandibles and palpi brown. Antennae brown, ventral part of the first segment yellow. Legs yellow, tarsi infuscate.

Head between the eyes deeply punctate, punctures rarely touching, spaces between them corrugated. Punctuation on vertex sparser. Eyes long, situated obliquely to longitudinal axis of head, head including eyes somewhat wider than pronotum. Antennae reaching the middle of elytra, their first joint one-third longer than the second, the third joint as long as the second, next joints gradually prolongated up to joint 7, joints 8–10 gradually shorter. Joint 11 one-third longer than 10, very slightly emarginate at half its length.

Pronotum somewhat longer than wide, widest at <sup>1</sup>/<sub>3</sub> of its length, narrowed both forwards and backwards. The anterior margin sometimes slightly emarginate. Pronotum more deeply and sparsely punctate than head, punctures on anterior and posterior parts connected by transverse wrinkles. Triangular impression always at front of the base, another, longitudinal impression is mostly in the middle of pronotum. Scutellum subtriangular, punctate like head.

Elytra corrugated, very finely, shortly and sparsely yellow pubescent, almost bald. Posterior coxa without any projection. Last tergite overlaps by <sup>1</sup>/<sub>2</sub> the last sternite, rounded apically, last sternite with wide emargination reaching to the mid-point of segment. Phallus Fig. 15. Female. Antennae somewhat shorter than in male, their third joint longer than the first. Last tergite overlaps by 1/4 the last sternite, very shallowly emarginate at the apex, last sternite rounded.

Length ♂♀: 6.0–7.7 mm.

Holotype: &, Bhutan: Thimphu, 31.V. 1972. Paratypes same locality and data, 5 & 6 & 2; Gidaphu, 2300 m, 2.VI. 1972, 2 & 2; Paro, 2700 m, 1972, 1 &; Chimakothi, 22. V. 1972, 1 &; Thimphu, VIII. 1975, W. Wittmer, 1 &. Holotype and paratypes in Naturhistorisches Museum, Basel, paratypes also in author's collection.

This species differs from all related species by the almost bald elytra and by the form of the phallus, which is narrowed apically.

#### 5. Chrysanthia fuscimembris Fairmaire, 1891 Figs 16, 19

Ann. Soc. ent. Belg., 35: 134.

Dorsal and ventral surface of body green, copperish-green or blue, the IX. urite in male, mouth parts, antennae and legs yellow or brown. Sometimes legs are strongly darkened. Head shallowly punctate, between punctures finely corrugated. Pronotum more roughly and deeply punctate than head, punctures on anterior part of pronotum connected by transverse wrinkles. Anterior and central part of pronotum with slight longitudinal impression (sometimes absent), another triangular, deeper impression at the base of pronotum. Elytra corrugated, sparsely, shortly yellow pubescent. Posterior coxa in male without projection. Phallus Fig. 16.

Length ♂♀: 5.8–7.2 mm.

Material examined: Kashmir: Andrewes Bequest, 4  $\eth \eth$  7  $\image \circlearrowright$  (BMNH); Kashmir: Rost, 1  $\circlearrowright$ ; Kashmir: Pailgam (Pahalgam), 1  $\circlearrowright$  (coll Pic, MHNP); Pakistan: Shogran, Khagan V., 2300–2750 m, 17. VI. 1977, Wittmer et Brancucci, 2  $\eth \eth$  3  $\image \circlearrowright$  (NHMB). I did not have a chance to study the type material of this species, but the examined specimens correspond well with Fairmaire's description, from which the second species from Kashmir, *Ch. wittmeri* n. sp., strongly differs.

#### 6. Chrysanthia cyanescens Pic, 1926 Fig. 17

Mél. exot.-ent., 46: 19. CHAMPION, 1927: Ent. Mon. Mag., 63: 249–250 (redescription).

Dorsal and ventral surface of body green or blue, mouth parts, the IX. urite in male, and the first three joints of antennae brown, legs dark brown or black. Head deeply punctate, areas between punctures finely corrugated, pronotum more roughly and deeply punctate than head, punctures on anterior part connected by transverse wrinkles. Anterior and central part of pronotum with longitudinal impression (sometimes absent), another triangular, always visible impression at the base of pronotum. Elytra corrugated, sparsely, shortly yellow pubescent. Posterior coxa in male without distinct projection. Phallus Fig. 17.

Length ♂♀: 5.7–8.6 mm.

Material examined: holotype and paratype  $(3^{\circ})$ , India, U.P.: Manali, Kulu (coll Pic, MHNP); Chakrata Div., 7–9,000 ft, V.1928, H.G.Champion, more specimens (BMNH).

## 7. Chrysanthia wittmeri n. sp. Fig. 18

Male. Dorsal and ventral surface of body metallic green, on the head metallic colouration reaching up to the middle of clypeus, rest of clypeus and mouth parts yellow, tips of mandibles and last joint of maxillary palpi brown. The first three joints of antennae yellow, subsequent joints infuscate. Legs yellow, tarsi dark. Last abdominal segment brown.

Head densely punctate, punctures touching, only on vertex is the punctuation somewhat sparser. Eyes long, situated obliquely to longitudinal axis of head, head including eyes only a little wider than pronotum. Antennae reaching to half the length of elytra, the first joint one-third longer than the second, the third joint very slightly longer than the first one, the fourth joint is the longest, following joints gradually shorter, last joint only slightly longer than joint 10, at <sup>2</sup>/<sub>3</sub> of its length very slightly emarginate.

Pronotum very slightly longer than wide, widest at <sup>1</sup>/<sub>3</sub> of its length, narrowing both anteriorly and posteriorly; more coarsely punctate than head, punctures in anterior and posterior parts connected by transverse wrinkles. At the base of pronotum an impression always visible, the longitudinal impression on disc can be less distinct. Scutellum more slightly punctate than head.

Elytra corrugated, densely, shortly pubescent. Posterior coxa with distinct projection. Last tergite one-third longer than last sternite, shallowly emarginate apically. Last sternite widely emarginate, emargination reaching up to one-third of its length. Phallus Fig. 18.

Female. Antenna shorter than in male, its last joint not emarginate. Pronotum slightly wider than long. Posterior coxa without projection, last tergite only slightly exceeding last sternite, both rounded apically.

Length ♂9: 8.5–8.8 mm.

Holotype:  $\delta$ , Kashmir, Sonamarg, 2600–2750 m, 17. VII. 1976, W. Wittmer. Paratypes: same locality and data 2  $\Im$ ?. Holotype and paratype in Naturhistorisches Museum, Basel, one paratype in author's collection. I provisionally attribute to this species also 4  $\Im$ ? with blue colouration and dark legs: Pakistan: Hazara, N.W.F. Prov., Upper Kagan Valley, Sharan, 8,000 ft, 9. VI. 1927, 2  $\Im$ ? (BMNH); Naran, Khagan V., 2370–2750 m, 19.–25. VI. 1977, Wittmer et Brancucci, 2  $\Im$ ? (NHMB).

*Ch.wittmeri* n.sp. differs from the two preceding species by the following characters:

Ch.wittmeri n.sp.	Ch. cyanescens Pic	
		Ch.fuscimembris Fairm.
Phallus more robust with small hooklets on its ventral side.	රිරි	Phallus more slender with small hooklets on its dorsal side.
Last sternite rounded apically.		Last sternite widely but shallowly, trian- gularly emarginate apically Fig. 19.

#### Key to males of Chrysanthia – species from the Indian subcontinent

1	Phallus with small hooklets at apex	2
_	Phallus without any hooklets	4
2	Hooklets situated on ventral side of phallus. Pakistan.	
	Ch.wittmeri n.sp.	
-	Hooklets situated on dorsal side of phallus	3
3	Phallus more slender, legs always dark brown. N. India	
	Ch. cyanescens Pic	
-	Phallus more robust, legs mostly yellow, rarely dark. Pakis-	
	tan Ch. fuscimembris Fairm.	
4	Phallus moderately bent towards apex. N. India	
	Ch.rugicollis Champ.	
-	Phallus straight	5
5	Phallus strongly narrowing towards the apex, elytra very	
	sparsely pubescent, apparently glabrous. Bhutan	
	Ch.bhutanica n.sp.	
-	Phallus only a little narrowing towards the apex, elytra more	
	densely and distinctly pubescent. N. India	
	Ch. himalaica Champ.	

The male of *Ch.valens* Champ. remains hitherto unknown. Females of this group can not be precisely determined, because of great variability of specific characters (punctuation, coloration).

#### V. Švihla

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