# Revision of the genus *Herbertfranziella* Kaszab and description of the new genus *Nepalofranziella* of Himalayan Dichillina (Coleoptera: Tenebrionidae: Stenosini)

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#### Abstract

The species of the genus *Herbertfranziella* (Kaszab, 1973) (Coleoptera: Tenebrionidae: Stenosini) are revised and five new species are described. *Nepalofranziella* **n. gen.** with two new species is described. Diagnostic characters are illustrated. Keys to all species of *Herbertfranziella*, *Nepalofranziella*, and allied genera of Himalayan Dichillina are provided. – New species: *H. almorensis* **n. sp.** (India), *H. bhimtaleica* **n. sp.** (India), *H. brancuccii* **n. sp.** (India), *H. himalayica* **n. sp.** (Nepal), *H. loebli* **n. sp.** (India), *N. kaszabi* **n. sp.** (Nepal), *N. schawalleri* **n. sp.** (Nepal). A neotype of *Herbertfranziella janushevi* Medvedev, 1991 is designated. *Herbertfranziella* is recorded for the first time from Bhutan.

K e y w o r d s : Coleoptera, Tenebrionidae, Stenosini, *Herbertfranziella*, *Herbertfranzia*, *Nepalofranziella*, new genus, new species, neotype designation, India, Nepal, Bhutan, Pakistan, Tajikistan.

#### Zusammenfassung

Die Arten der Gattung *Herbertfranziella* (Kaszab, 1973) (Coleoptera: Tenebrionidae: Stenosini) werden revidiert und fünf neue Arten beschrieben. *Nepalofranziella* **n. gen.** mit zwei neuen Arten wird beschrieben. Die diagnostischen Merkmale werden abgebildet. Bestimmungsschlüssel für alle Arten der Gattungen *Herbertfranziella* und *Nepalofranziella* sowie für die verwandten Gattungen der Dichillina des Himalaya werden aufgestellt. – Neue Arten: *H. almorensis* **n. sp.** (Indien), *H. bhimtaleica* **n. sp.** (Indien), *H. brancuccii* **n. sp.** (Indien), *H. himalayica* **n. sp.** (Nepal), *H. loebli* **n. sp.** (Indien), *N. kaszabi* **n. sp.** (Nepal), *N. schawalleri* **n. sp.** (Nepal). Eine Neotype von *Herbertfranziella janushevi* Medvedev, 1991 wird festgelegt. *Herbertfranziella* wird zum ersten Mal für die Fauna von Bhutan nachgewiesen.

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#### **1** Introduction

The genus *Herbertfranziella* Kaszab, 1973 was described as a subgenus of *Herbertfranzia* Kaszab, 1973, based on specimens from Nepal collected by Prof. HERBERT FRANZ. When describing *Herbertfranzia*, KASZAB (1973) distinguished two subgenera, each with one species, *H. (Herbertfranzia) nepalica* and *H. (Herbertfranziella) eutagenoides*, and illustrated pronotum, antenna and the dorsal view of the head.

The subgenus *Herbertfranziella* was raised to generic level by MEDVEDEV (1991), who also described the new species *Herbertfranziella janushevi* from Tajikistan, and illustrated pronotum, antenna and the dorsal view of the head. Finally, MEDVEDEV (1994) described *Herbertfran*-

*ziella kumaona* from India (Uttaranchal), and published a key to the three species of the genus.

The known distribution of the genus *Herbertfranziella* (Fig. 1) covers Tajikistan (only the lost type specimen of *H. janushevi*), northern Pakistan (Dir, Swat, Chitral), northern India (Himachal Pradesh, Uttaranchal), Nepal and now also Bhutan. The specimens were collected from altitudes between 1300 and 3200 m, all are flightless.

Only scarce information exists on the method of collecting. KASZAB (1975a) mentioned four specimens of *H. eutagenoides* collected in Nepal near Chauta (= Chautha) by H. FRANZ, under a shady rock wall in thick humus layers under a nut tree. I have not seen this material so this locality is not included in the map. The lost type of *H. janushevi* was also collected under a nut tree (*Juglans re*- gia). Most species of the tribe Stenosini prefer places under stones in the shadow of solitary trees, at forest edges or under trees in steppe zones. I have collected *H. himalayica* in the Annapurna range near Pisang at an altitude of 3200 m under flat stones in the shadow of *Pinus*. The beetles occur on the lower surface of the stones and also in the detritus below.

During my previous work on the genus *Pseudethas* I looked for other new species and specimens in the borrowed materials erroneously determined as *Pseudethas* spp. Two interesting specimens were found. Herein I describe them as two new species of a new genus, *Nepalofranziella*. One of them was labelled by KASZAB 1985 as *Stenosis* sp. n., the other by BEČVÁŘ 2000 as *Dichillus* sp.

The genus *Herbertfranziella* is characterized by rounded and elongate elytra with fine convex intervals without keels. The humeral corner of the elytra is created by interval 9. The elytral base is mostly wider than the pronotal base. The tempora are widest at the posterior margin of the eyes then shortly almost parallel or narrowed in a gentle arch towards the cervix. Setae on elytra are simply tapering. All male tibiae have small inner subapical teeth. Hindwings are absent. Body length 2.25–3.30 mm.

The genus *Nepalofranziella* is characterized by elliptical elytra with fine convex intervals without keels. Interval 9 of the elytra is without humeral corner. The elytral base is as wide as the pronotal base. The tempora are almost parallel shortly after posterior margin of the eyes then narrowed in a gentle arch towards the cervix. The setae on the elytra are erect and more or less clavate, sometimes only on the apical region of elytra. All male tibiae have small inner subapical teeth (female tibiae unknown). Body length 2.95–3.40 mm.

The genus *Herbertfranzia* is characterized by oval elytra with convex intervals, with keeled intervals 7 and 9. The humeral corner of the elytra is created by interval 7. The elytral base is hardly wider than the pronotal base. The tempora are almost parallel shortly after posterior margin of eyes, then markedly narrowed to cervix. All male and female tibiae without inner subapical teeth.

For the sake of completeness I mention here the monotypic genus *Herbertfranzia*, which is known from Nepal (Fig. 1) from altitudes between 300 and 2500 m. The genera *Herbertfranziella* and *Nepalofranziella* are similar to the genera *Pseudethas* and *Herbertfranzia* in the subtribe Dichillina (see keys, chapter 7).



Fig. 1. Distribution of species of Herbertfranziella, Nepalofranziella and Herbertfranzia.

Acronyms of repositories

- BMNH The Natural History Museum, London, U.K. (MAX BARCLAY)
- CAPE Collection ANDREAS PÜTZ, Eisenhüttenstadt, Germany
- CBS Collection STANISLAV BEČVÁŘ, České Budějovice, Czech Republic
- CFR Collection RENÉ FOUQUÈ, Liberec, Czech Republic
- HNHM Hungarian Natural History Museum, Budapest, Hungary (Dr. Ottó MERKL)
- MHNG Muséum d'Histoire Naturelle, Genève, Switzerland (Dr. GIULIO CUCCODORO)
- MNHN Muséum National d'Histoire Naturelle, Paris, France (ANTOINE MANTILLERI)
- NHMB Naturhistorisches Museum, Basel, Switzerland (Dr. MICHEL BRANCUCCI, ISABELLE ZÜRCHER)
- SMNS Staatliches Museum für Naturkunde, Stuttgart, Germany (Dr. WOLFGANG SCHAWALLER)
- ZIN Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia (MARK GABRIELEVICH VOLKOVICH)

#### Acknowledgements

I would like to thank all curators and colleagues for the loan of material. For critical comments and valuable advice I thank Dr. OTTÓ MERKL (Budapest) and Dr. WOLFGANG SCHAWALLER (Stuttgart). Thanks are also due to my friends LUBOŠ DEMBICKÝ (Moravian Museum, Brno) for preparing the photograph of the lost specimen and also to JIŘÍ HÁJEK and MARTIN FIKÁČEK (National Museum, Prague) for help with preparation of photographs.

#### 2 Methods

Length of the head is measured from the anterior margin of the clypeus to the cervix. Length of the elytra is measured from the humeral corner to the apex. Length of the pronotum is measured along the midline. Width of the elytral base is measured across the top of the humeral corners.

In the lists of materials, some localities are not cited in the original spelling of the labels, but are given in a standardized form.

The photographs were taken using a Canon EOS 550D and Helicon SW for composition of approximately 30 photos. The photo of the lost holotype of *H. janushevi* was taken with a Nikon E4500. Microscope MSB10 with a 100x magnification was used for studying the specimens.

The map is created with Planiglobe – digital vector map creator (http://www.planiglobe.com) and enhanced with CorelDRAW.

#### 3 Previously known species of Herbertfranziella

#### Herbertfranziella eutagenoides (Kaszab, 1973) (Figs. 5, 20, 31)

Herbertfranzia (Herbertfranziella) eutagenoides Kaszab, 1973 – KASZAB 1973: 29.

Herbertfranziella eutagenoides – MEDVEDEV 1991: 559.

Studied type material: Nepal, Phulchoki, Kathmandu, IX.-X.1971, leg. H. FRANZ, 3 paratypes (one of it 3) HNHM, 1 paratype MNHN. N e w material: Nepal, Latipur Distr., Phulchoki, 2600 m, 14.X.1983, leg. A. SMETANA & I. LÖBL, 1 ex. CFR. – Nepal, Latipur Distr., Phulchoki, 2550–2700 m, 13.–17.X.1983, leg. A. SMETANA & I. LÖBL, 1 ex. MHNG. – Nepal, Manaslu Mts., S of Bara Pokhari, 2000 m, 7.IV.2003, leg. J. SCHMIDT, 2 ♂♂ SMNS.

Redescription: Body length 2.4-2.7 mm, body width 0.8–0.9 mm. – Body, legs and antennae rusty brown. Setae decumbent and fine. - Head length/width ratio as 35:32, head widest at half eye length before anterior margin of eyes. Tempora widest at posterior margin of eyes, from there gently arched to cervix. Genae almost parallel from posterior margin of eyes to widest point, from there gently arched to clypeus. Clypeus rounded. Two distinct impressions on frons. Ratio of head/cervix widths as 32:25. Eyes completely divided by genae, dorsal part with about 6 facets, ventral part with about 5 facets. Punctation rough and rounded, punctures almost confluent, smaller towards frons, with light forward directed setae, twice as long as puncture diameter. – Antennae (Fig. 20): densely and lightly haired; setae on middle antennomeres as long as  $\frac{3}{4}$  length of antennomeres; antennomeres 2–11 combined twice as long as head width; antennomeres club-shaped; antennomeres 4-9 more rounded; last antennomere truncate latero-apically; antennomeres 3, 10 and 11 considerably larger than the others; length ratio of antennomeres 2–11 as 4.8: 5.5: 5: 4.3: 4: 4: 4: 4.3: 5.5: 7.5, width ratio as 4.3:4.5:4.5:4.5:4:4:4:4.3:5:4.8. -Pronotum slightly straight, arched laterally, hardly longer than wide (39:37), widest at anterior third; width ratio of head/anterior edges of pronotum/widest point of pronotum/posterior edges of pronotum as 32:33:37:29. Anterior corners almost rectangular, not protruding. Posterior corners obtusely rounded. Base convex. Anterior margin straight. Punctation dense and rounded, punctures almost touching each other, slightly larger than on head, with light forward directed setae, setae twice as long as puncture diameter. Punctural interspaces glossy. - Elytra with arched sides; 2.8 times as long, 1.7 times as wide as pronotum, widest in the middle; elytral length/width ratio as 110:61. Base markedly concave, hardly wider than pronotal base (30:29). Each elytron with 10 rows of punctures, 8 on dorsal side, 2 on deflexed part; interval 9 keeled, forming rounded indistinct humeral corner; all intervals gently arched. Punctures deep, larger than on pronotum. Distance between punctures in row 2 equals half of puncture diameter. Punctural interspaces glossy, each interval with one row of fine punctures with light decumbent setae twice as long as puncture diameter. Scutellum very small; scutellar row with five punctures; scutellar row vanishing after length of one third of width of elytral base. Epipleura with one row of punctures throughout whole length, punctures somewhat smaller than in row 10, smaller towards apex. -Aedeagus (Fig. 31): length approximately 0.51 mm, with a few fine and short apical setae. - Abdomen: punctures

shallow, first ventrite with punctures smaller than on epipleura, distance between punctures equals  $\frac{1}{2}-1$  of puncture diameter; second ventrite with punctures of half size as on epipleura, distance between punctures equals 1–2 puncture diameters.

D i a g n o s i s : The almost equal width of elytral base and pronotal base is distinctive. This character is shared only with *H. bhimtaleica* n. sp. from which it differs by the shape of the humeral corners of elytra and club-shaped antennomeres.

Distribution: Nepal.

#### Herbertfranziella janushevi Medvedev, 1991 (Figs. 8, 9, 22, 33)

Herbertfranziella janushevi Medvedev, 1991 – MEDVEDEV 1991: 560.

Studied type material: Holotype ( $\mathcal{S}$ ): Tajikistan, Surhku Hills, hillside to Vakhsh river, forest vegetation, under *Juglans regia*, 31.V.1974, leg. W. JANUSZ. The holotype is irretrievably lost. – Neotype ( $\mathcal{S}$ ): Pakistan, Dir, Lawarai Pass, 2700 m, 21.V.1983, leg. C BESUCHET & I. LOBL, ZIN (originally MHNG), here designated (see Remarks below).

N e w material: Pakistan, Dir, Lawarai Pass, 2700– 3300 m, 28.VI.1982, leg. D. Erber & W. Heinz,  $1 \bigcirc$  SMNS. – Pakistan, Dir, Lawarai Pass, 2700 m, 21.V.1983, leg. C. Besuchet & I. Löbl., 4 ex. MHNG, 1 ex. SMNS. – Pakistan, Dir, Lawarai Pass, 3000 m, 21.V.1983, leg. C. Besuchet & I. Löbl., 126 ex. MHNG, 3 ex. SMNS, 8 ex. CBS, 5 ex. CFR. – Pakistan, Chitral, Lawarai Pass, 2600 m, 23.V.1983, leg. C. Besuchet & I. Löbl., 2 ex. MHNG. – Pakistan, Swat, Malam Jabba, 2500–2600 m, 18.V.1983, leg. C. Besuchet & I. Löbl., 12 ex. SMNS, 1 ex. CFR. – Pakistan, Swat, S Miandam, 2400–2500 m, 17.V.1983, leg. C. Besuchet & I. Löbl., 1 ex. SMNS.

Redescription: Body length 2.25–2.85 mm, body width 0.75-0.95 mm. - Body brown to rusty brown, antennae and legs rusty brown. Setae decumbent and fine. -Head length/width ratio as 30:30, head widest at half eye length before anterior margin of eyes. Tempora almost parallel from posterior margin of eyes over a distance of half eye length, then slightly narrowing towards cervix; widest at posterior margin of eyes. Genae widening in a straight line from posterior margin of eyes to widest part of head, then narrowing in a straight line towards clypeus. Clypeus rounded. Two impressions on frons. Ratio of head/cervix widths as 30:23. Eyes completely divided by genae, dorsal part with about 6 facets, ventral part with about 5 facets. Punctation fine and dense, punctures almost touching each other. Setae fine, light, directed anteriorly, 1.5 times as long as puncture diameter. - Antennae (Fig. 22): densely and lightly haired; setae on middle antennomeres as long as half length of antennomeres; antennomeres 2-11 combined twice as long as width of pronotal base; antennomeres 1-9 club-shaped, 10 trapezoidal, last antennomere truncate latero-apically; antennomeres 3, 10 and 11 considerably larger than the others; length ratio of antennomeres 2-11 as 4.5:6:5:4.3:4.3:4.3:4:5.5:8, width ratio as 3.8:3.8:4:4:4.3:4.3:4.3:4.5:5.5:5.5. – Pronotum heart-shaped, slightly shorter than wide (33:34), widest at anterior third; width ratio of head/anterior edges of pronotum/widest point of pronotum/posterior edges of pronotum as 30:29:34:26. Anterior corners slightly protruding, obtusely rounded. Posterior corners markedly obtuse. Anterior margin straight. Base considerably convex. Punctation rounded, rougher than on head. Punctures in the middle almost touching each other, sparser towards lateral margin. Pronotum with fine light setae twice as long as puncture diameter. - Elvtra slightly flattened, almost parallel-sided in the middle third; 3.0 times as long, 1.6 times as wide as pronotum, widest in the middle; elytral length/width ratio as 100:54. Base concave, wider than pronotal base (29:26). Each elytron with 10 rows of punctures, 8 on dorsal side, 2 on deflexed part; interval 9 forming rounded humeral corner; all intervals gently arched. Punctures slightly larger than on pronotum, almost confluent. Distance between punctures in row 2 approximately equal to puncture diameter. Punctural interspaces glossy, gently wrinkled, each interval with one row of light, fine setae 1.5 times as long as puncture diameter. Scutellum very small; scutellar row with four punctures; scutellar row vanishing after length of one third of width of elytral base. Epipleura with one row of punctures throughout whole length, punctures smaller than in row 10, almost confluent from middle to apex. - Aedeagus (Fig. 33): length approximately 0.5 mm, with a few very fine apical setae. - Abdomen: first ventrite with punctures smaller than on epipleura, distance between punctures equals 1-2 puncture diameters; last ventrite with distance between punctures equal to puncture diameter. Setae twice as long as puncture diameter.

D i a g n o s i s : The shorter than wide pronotum is distinctive. This character is shared only with *H. himalayica* n. sp. from which *H. janushevi* differs by the rounded humeral corners of the elytra, and by the fine decumbent setae, missing in the puncture rows.

R e m a r k s: In the large series of specimens that I studied, some variation in the shape of the pronotum was observed, especially in the position of the widest point, and also in the colouration, which varies from rusty to brown. – Neotype designation: When I had the holotype on loan for the first time (the only specimen known to me at that time), I could not take good photographs, but I could compare it with other material, mainly from MHNG. Unfortunately, when the holotype was borrowed from the ZIN for the second time in order to produce a better photograph, the box with material was stolen. Therefore, a neotype of *H. janushevi* Medvedev, 1991 is designated. For the photo of the lost holotype see Fig. 8.

Distribution: Tajikistan, northern Pakistan (Dir, Swat, Chitral).

#### Herbertfranziella kumaona Medvedev, 1994 (Figs. 7, 23, 34)

#### Herbertfranziella kumaona Medvedev, 1994 – MEDVEDEV 1994: 852.

Studied type material: India, Uttaranchal (labelled: U. P.), Kumaon, W Almora, VI.1917, leg. H. G. CHAMPION,  $\bigcirc$  holotype BMNH.

N e w m a t e r i a l : India, Uttaranchal (labelled: U. P.), Kumaon, W Almora, VI.1917, leg. H. G. CHAMPION, 1 ex. BMNH. – India, Nainital, W Almora, leg. H. G. CHAMPION, 1 ex. BMNH. – India, Uttaranchal (labelled: Uttar Pradesh), Mussoorie, Dhanolt, 2250 m, 11.VII.1989, leg. A. RIEDEL, 1  $\Im$  SMNS.

Redescription: Body length 2.7–3.2 mm, body width 0.90-1.05 mm. - Body brown, legs and antennae rusty brown. Setae decumbent and fine. - Head length/ width ratio as 42:36, head widest at half eye length before anterior margin of eyes. Tempora widest at posterior margin of eyes, from there gently arched to cervix. Genae slightly widening from posterior margin of eyes to widest part of head, where they are rounded, then running straight towards clypeus. Clypeus rounded. Two distinct impressions on frons. Ratio of head/cervix widths as 36:30. Eyes completely divided by genae, dorsal part with about 6 facets, ventral part with about 5 facets. Punctures almost confluent, rounded, on vertex drop-shaped; with fine light forward directed setae, twice as long as puncture diameter. - Antennae (Fig. 23): densely and lightly haired; setae on middle antennomeres as long as  $\frac{3}{4}$  length of antennomeres; antennomeres 2-11 combined twice as long as head width; antennomeres club-shaped; last antennomere truncate latero-apically; length ratio of antennomeres 2-11 as 5:5.5: 4.8:4.3:4.3:4.3:4.3:4.5:5.8:7.8, width ratio as 3.5:3.5: 3.5:3.5:3.5:3.5:3.5:3.8:4:4. – Pronotum with lateral margins rounded, longer than wide (46:42), widest at anterior quarter; width ratio of head/anterior edges of pronotum/widest point of pronotum/posterior edges of pronotum as 36:37:42:32. Anterior corners rectangular. Posterior corners obtusely rounded. Anterior margin slightly concave near corners, convex in the middle; anterior corners not protruding. Base convex. Punctation denser than on head, punctures somewhat drop-shaped with light forward directed setae, distance between punctures less than half of puncture diameter, setae twice as long as puncture diameter. – Elytra rounded, 3.0 times as long, 1.8 times as wide as pronotum, widest just posterior to the middle; elytral length/width ratio as 136:75. Base markedly concave, much wider than pronotal base (42:32). Each elytron with 10 rows of punctures; interval 9 forming humeral corner;

all intervals gently arched, interval 9 keeled. Punctures coarser than on pronotum; distance between punctures in row 2 equals half of puncture diameter. Punctural interspaces glossy and gently wrinkled, each interval with one row of light setae 1.5 times as long as puncture diameter. Scutellum very small; scutellar row with three punctures; scutellar row vanishing after length of one quarter of width of elytral base. Epipleura with one row of punctures throughout whole length, punctures smaller than in row 10, confluent from middle to apex. – Aedeagus (Fig. 34): length approximately 0.85 mm, with a few very fine apical setae. – Abdomen: first ventrite with smaller punctures than on epipleura, distance between punctures equals 1.5 puncture diameters; punctation denser towards last ventrite. Setae fine, 1.5 times as long as puncture diameter.

D i a g n o s i s : This species has the elytral base markedly wider than the pronotal base and the pronotum longer than wide, similar as in *H. almorensis* n. sp. and *H. brancuccii* n. sp. From *H. almorensis* n. sp. it differs by the punctures in row not confluent in a groove. From *H. brancuccii* n. sp. it differs by the lateral margin of the pronotum, which is entirely rounded (slightly concave before posterior corner in *H. brancuccii*). The shape of the aedeagus with trapezoidal apex is specific, and the setae on the apex are distinct.

Distribution: India (Uttaranchal).

#### 4 New species of Herbertfranziella

Herbertfranziella almorensis n. sp. (Figs. 2, 17, 28)

Holotype ( $\mathcal{Q}$ ): India, Uttaranchal, Kumaon, W Almora, leg. H. G. CHAMPION, BMNH.

P a r a t y p e : Same data as holotype, 1 ♂ BMNH.

E t y m o l o g y : Named after the village Almora where the type series was collected.

D e s c r i p t i o n : Body length 2.7–2.8 mm, body width 0.85–0.90 mm. – Body rusty brown, legs and antennae lighter. Setae short, decumbent and fine. – Head length/ width ratio as 35:33, widest at a distance of eye length before anterior margin of eyes. Tempora narrowed in a nearly straight line to cervix, widest at posterior margin of eyes. Genae widening from posterior margin of eyes to widest part of head; from widest part straight to clypeus, at half-length slightly concave. Clypeus straight. Two distinct impressions on frons. Ratio of head/cervix widths as 33:25. Eyes completely divided by genae, dorsal part with about 5 facets, ventral part with about 6 facets. Punctation dense; punctural interspaces distinctly wrinkled; with fine light forward directed setae, 1.5 times as long as puncture diameter. – Antennae (Fig. 17): densely and lightly haired;



**Figs. 2–7.** *Herbertfranziella* spp., dorsal view. – **2.** *H. almorensis* n. sp., holotype  $\mathcal{Q}$ , India (Uttaranchal). **3.** *H. bhimtaleica* n. sp., holotype  $\mathcal{A}$ , India (Uttaranchal). **4.** *H. brancuccii* n. sp., holotype  $\mathcal{A}$ , India (Himachal Pradesh). **5.** *H. eutagenoides*, paratype  $\mathcal{A}$ , Nepal (Central region – Latipur). **6.** *H. himalayica* n. sp., holotype  $\mathcal{A}$ , Nepal (Gandaki). **7.** *H. kumaona*, holotype  $\mathcal{Q}$ , India (Uttaranchal). – Scale: 2 mm.





**Figs. 8–13.** *Herbertfranziella*, *Herbertfranzia* and *Nepalofranziella* spp., dorsal view. – **8**. *Herbertfranziella janushevi*, lost holotype  $\mathcal{F}$ , Tajikistan. **9**. *H. janushevi*, neotype  $\mathcal{F}$ , Pakistan (Dir). **10**. *H. loebli* n. sp., holotype  $\mathcal{P}$ , India (Uttaranchal). **11**. *Herbertfranzia nepalica*, paratype  $\mathcal{P}$ , Nepal. **12**. *Nepalofranziella schawalleri* n. sp., holotype  $\mathcal{F}$ , Nepal. **13**. *N. kaszabi* n. sp., holotype  $\mathcal{F}$ , Nepal. – Scale: 2 mm.



Figs. 14–27. – 14. Nepalofranziella kaszabi n. sp., setae on apex of elytra. 15. N. schawalleri n. sp., setae on apex of elytra. 16. N. schawalleri n. sp., tooth on posterior tibia. – 17–27. Antennae. – 17. Herbertfranziella almorensis n. sp. 18. H. bhimtaleica n. sp. 19. H. brancuccii n. sp. 20. H. eutagenoides. 21. H. himalayica n. sp. 22. H. janushevi. 23. H. kumaona. 24. H. loebli n. sp. 25. Nepalofranziella kaszabi n. sp. 26. N. schawalleri n. sp. 27. Herbertfranzia nepalica. – Scale (17–27): 1 mm.

setae on middle antennomeres as long as half length of antennomeres; antennomeres 2–11 combined twice as long as width of pronotal base; antennomeres club-shaped; last antennomere truncate latero-apically; length ratio of antennomeres 2–11 as 5.3:6.5:5:5.3:4.3:4.3:4.3:4.3:5.8:7.3, width ratio as 4:4:4:4:3.8:3.8:3.8:3.8:4.5:4.5. – Pronotum longer than wide (42:37), widest at anterior third; width ratio of head/anterior edges of pronotum/ widest point of pronotum/posterior edges of pronotum as 33:36:37:30. Anterior corners rectangular. Posterior corners obtuse. Lateral margins slightly concave before posterior corners. Anterior margin convex. Base convex. Punctation same as on head; punctures almost confluent. Punctural interspaces wrinkled; punctures smaller towards lateral margin. Setae 1.5 times as long as puncture diameter. – Elytra 2.9 times as long, 1.8 times as wide as pronotum, widest in the middle; elytral length/width ratio as 123:65; lateral margins rounded, concave before humeral corners. Base concave, wider than pronotal base (35:30). Each elytron with 10 rows of punctures; interval 9 form-



Figs. 28–38. Aedeagus of Herbertfranziella, Nepalofranziella and Herbertfranzia spp. – 28. Herbertfranziella almorensis n. sp. 29. H. bhimtaleica n. sp. 30. H. brancuccii n. sp. 31. H. eutagenoides. 32. H. himalayica n. sp. 33. H. janushevi. 34. H. kumaona. 35. H. loebli n. sp. 36. Nepalofranziella kaszabi n. sp. 37. N. schawalleri n. sp. 38. Herbertfranzia nepalica. – Scale: 1 mm.

ing rounded humeral corner; all intervals gently arched, wrinkled and each with one row of short light setae; interval 9 keeled. Punctures large and very dense, punctures in row almost confluent in a groove. Scutellum very small; scutellar row with four punctures; scutellar row vanishing after length of one quarter of width of elytral base. Epipleura with one row of punctures throughout whole length, punctures smaller than in row 10, smaller towards apex. – Aedeagus (Fig. 28): length approximately 0.63 mm, with a few very fine apical setae. – Abdomen: puncture diameter half as on row 10, distance between punctures less than puncture diameter.

D i a g n o s i s: The row of punctures on the elytra is almost confluent in a groove. The genae are widening from posterior margin of eyes. All other species of the genus have parallel or almost parallel genae.

#### Herbertfranziella bhimtaleica n. sp. (Figs. 3, 18, 29)

H o l o t y p e ( $\mathcal{F}$ ): India, Uttaranchal (labelled: UP), Kumaon, Bhim Tal, 1500 m, 4.X.1979, leg. I. LÖBL, MHNG.

P a r a t y p e s : Same data as holotype,  $1 \stackrel{\bigcirc}{\rightarrow} MHNG$ ,  $1 \stackrel{\bigcirc}{\circ} CBS$ . – India, Uttaranchal (labelled: UP), Bhim Tal, 1800 m, 4.X.1979, leg. I. LÖBL,  $1 \stackrel{\bigcirc}{\circ} SMNS$ .

E t y m o l o g y : Named after Bhim Tal village where the type series was collected.

Description: Body length 2.75-2.90 mm, body width 0.85-0.90 mm. - Body rusty brown, legs and antennae lighter. Setae decumbent and fine. - Head length/width ratio as 38:32, head widest at half distance of eye length before anterior margin of eyes. Tempora widest at posterior margin of eyes, then narrowing in a gentle arch to cervix. Genae almost parallel from middle of eyes to widest part of head; from widest part rounded to clypeus. Clypeus rounded. Two distinct impressions on frons. Ratio of head/ cervix widths as 32:24. Eyes reduced, completely divided by genae, dorsal part with about 7 facets, ventral part with about 6 facets. Punctation dense; punctures rounded, almost confluent; punctural interspaces glossy. Setae twice as long as puncture diameter. - Antennae (Fig. 18): densely and lightly haired; setae on middle antennomeres as long as <sup>3</sup>/<sub>4</sub> length of antennomeres; antennomeres 2-11 combined twice as long as head width; antennomeres trapezoidal; last antennomere truncate latero-apically; length ratio of antennomeres 2-11 as 4.5:5.3:5:5:5:5:5:5:5:5: 5.8:7.5, width ratio as 4.3:4.5:4.5:4.5:4.5:4.5:4.8: 4.8:5.3:5.5. - Pronotum longer than wide (37:35), widest at anterior guarter; width ratio of head/anterior edges of pronotum/widest point of pronotum/posterior edges of pronotum as 32:31:35:27. Anterior corners rectangular, slightly arched. Posterior corners obtuse. Lateral margins gently arched. Anterior margin straight; anterior corners slightly protruding. Base slightly convex. Punctation denser than on head, punctures rounded, almost confluent with light forward directed setae, twice as long as puncture diameter. - Elytra arched, 3.1 times as long, 1.8 times as wide as pronotum, widest in the middle; elytral length/ width ratio as 115:62. Base concave, as wide as base of pronotum. Each elytron with 10 rows of punctures; interval 9 forming sharp, obliquely directed humeral corner; all intervals gently arched, interval 9 keeled. Punctures rounded. Distance between punctures in row 2 half to one puncture diameter. Punctural interspaces glossy, with very fine punctures; on each interval one row of very gentle punctures with light setae. Setae twice as long as puncture diameter. Scutellum very small; scutellar row almost imperceptible, with 1-2 punctures; scutellar row vanishing after length of one eighth of width of elytral base. Epipleura with one row of punctures throughout whole length, confluent in a groove, punctures smaller than in row 10, smaller towards apex. - Aedeagus (Fig. 29): length approximately 0.66 mm, with very fine apical setae. - Abdomen: punctation very fine, punctures smaller than on epipleura, distance between punctures equals 2 puncture diameters.

Diagnosis: *H. bhimtaleica* n.sp. shares with *H. eutagenoides* the elytral base as wide as the pronotal base. All other species of the genus have the elytral base markedly wider than the pronotal base. The sharp obliquely directed humeral corners of the elytra and the trapezoidal shape of the antennomeres are distinctive.

#### Herbertfranziella brancuccii n. sp. (Figs. 4, 19, 30)

Holotype (♂): India, Himachal Pradesh, Chopal–Khangna Nallah, 2250 m, 7.V.1977, leg. W. WITTMER & M. BRANCUCCI, SMNS.

Paratypes: Same data as holotype,  $1 \stackrel{>}{\circ}, 2 \stackrel{\bigcirc}{\circ}$  NHMB. – India, Uttaranchal, Chaktrata Distr., Konain, 2450 m, 24.– 30.V.1922,  $1 \stackrel{\bigcirc}{\circ}$  BMNH.

E t y m o l o g y : Named in memory of Dr. MICHEL BRANCUCCI (1950–2012), one of the collectors of the type series.

Description: Body length 2.50–3.05 mm, body width 0.85–0.90 mm. – Body rusty brown, legs and an-

tennae lighter. Setae decumbent and fine. - Head length/ width ratio as 35:32, head widest at a distance of half eye length before anterior margin of eyes. Tempora narrowing in an almost straight line to cervix, widest at posterior margin of eyes. Genae widening from posterior margin of eyes to widest part of head; from widest part in a gentle arch to clypeus. Clypeus rounded. Two distinct impressions on frons. Ratio of head/cervix widths as 32:27. Eyes markedly regulate, completely divided by genae, dorsal part with about 6 facets, ventral part with about 7 facets. Punctation dense, rounded and punctures almost confluent; punctural interspaces wrinkled; with fine light forward directed setae, 1.5 times as long as puncture diameter. - Antennae (Fig. 19): densely and lightly haired; setae on middle antennomeres as long as half length of antennomeres; antennomeres 2-11 combined twice as long as width of pronotal base; antennomeres club-shaped; last antennomere truncate latero-apically; length ratio of antennomeres 2-11 as 5.5:6.5:5:5.3:4.8:5:4.5:4.8:6.3:8.3, width ratio as 4: 4.3: 4: 4.3: 4: 3.8: 3.8: 4.5: 6: 5.5. – Pronotum somewhat heart-shaped, hardly longer than wide (42:40), widest at anterior third; width ratio of head/anterior edges of pronotum/widest point of pronotum/posterior edges of pronotum as 32:35:40:30. Anterior corners rectangular. Posterior corners obtuse. Lateral margins slightly concave before posterior corners. Anterior margin straight. Base convex. Punctures rounded and slightly larger than on head; punctures almost confluent. Punctural interspaces wrinkled. Setae 1.5 times as long as puncture diameter. - Elytra rounded, almost parallel in the middle third, 2.6 times as long, 1.6 times as wide as pronotum, widest in the middle; elytral length/width ratio as 110:64. Base concave, wider than pronotal base (34:30). Each elytron with 10 rows of punctures; interval 9 forming rounded humeral corner; all intervals gently arched, wrinkled and with one row of short light setae; interval 9 distinctly keeled. Punctures large and very dense, distance between punctures in row 2 smaller than half of puncture diameter. Punctural interspaces wrinkled. Scutellum very small; scutellar row with three punctures; scutellar row vanishing after length of one quarter of width of elytral base. Epipleura with one row of punctures throughout whole length, punctures smaller than in row 10, confluent in a groove, smaller towards apex. - Aedeagus (Fig. 30): length approximately 0.71 mm, with very fine apical setae. - Abdomen: first ventrite with fine punctures half as large as on middle of epipleura, distance between punctures equals 1.5 puncture diameters; on second to last ventrite punctures slightly smaller and distance between punctures one puncture diameter. Punctural interspaces on all ventrites wrinkled. Setae very fine.

D i a g n o s i s : This species is similar to *H. almorensis* n. sp. and *H. kumaona* in having the elytral base markedly wider than the pronotal base and the pronotum longer than wide. Distinctive is the shape of the pronotum with straight

anterior margin, and the lateral margins slightly concave before posterior corners. The aedeagus is narrow and acute.

> *Herbertfranziella himalayica* **n. sp.** (Figs. 6, 21, 32)

Holotype (♂): Nepal, Gandaki Zone, Manang Distr., Lower Pisang, 3200 m, 4.V.2007, leg. R. & H. Fouquè, CFR.

Paratypes: Same data as holotype, 74 ex. CFR, 2 ex. HNHM, 2 ex. MHNG, 2 ex. MNHN, 2 ex. BMNH, 2 ex. NHMB, 2 ex. SMNS, 2 ex. ZIN.

Other material: Nepal, Prov. Bagmati, Jangtang Ridge NE Barahbise, 3250 m, 5.V.1981, leg. I. LOBL & A. SMETANA, 3 ex. SMNS, 3 ex. MHNG, 1 ex. CBS, 1 ex. CFR. – Nepal, Panchthar Distr., ridge between Sheltoti and Paniporua, deciduous forest, 2200–2450 m, 29.VIII.1983, leg. J. MARTENS & B. DAAMS, 1 ex. SMNS. – Nepal, Terai, Chitre, 27°07'N, 87°24'E (labelled: 26°07'N, 87°24'E – coordinates in India), 2150 m, 4.III.1962, forest leaf litter, leg. K. H. HYATT, BMNH Nepal Expedition, 1 ex. BMNH. – Nepal, Bagmati, Sindhupalchok, Gangjwal, 2500 m, 6.–7.VI.1989, leg. M. BRANCUCCI, 1 ex. NHMB. – Nepal, Jumla, Dampa, Pass to Chauta, leg. H. FRANZ, 1 ex. HNHM. – Bhutan, Dorjula, 3100 m, 3.IX.1976, leg. D. KHANDU, 1 ex. NHMB.

E t y m o l o g y: Named after the Himalayas where the type series was collected.

Description: Body length 2.4–2.9 mm, body width 0.8-1.0 mm. - Body brown, legs and antennae lighter. Setae dense, long and erect. - Head length/width ratio as 37:34, head widest at a distance of half eye length before anterior margin of eyes. Tempora widest at posterior margin of eyes, from there gently arched to cervix. Genae almost parallel from posterior margin of eyes to widest part of head, from there in straight line to clypeus. Clypeus rounded. Two distinct impressions on frons. Ratio of head/ cervix widths as 34: 27. Eyes completely divided by genae, ventral part considerably reduced, dorsal part with about 7 facets, ventral part with about 4 facets. Punctation dense, rounded, punctures almost confluent, particularly towards clypeus. Setae on head 3 times as long as puncture diameter on vertex. - Antennae (Fig. 21): with light, dense and erect hairs; setae on middle antennomeres as long as <sup>3</sup>/<sub>4</sub> length of antennomeres; antennomeres 2-11 combined twice as long as width of cervix; antennomeres club-shaped; antennomeres 4-9 more rounded; last antennomere truncate latero-apically and rounded; length ratio of antennomeres 2-11 as 5.5: 6.5: 4.8: 4.8: 4.3: 4:4: 4:6: 7.5, width ratio as 4.3:4.3:4.5:4.8:4.3:4.3:4.3:4.8:6:5.5. - Pronotum somewhat shorter than wide (39:40), widest at anterior third; width ratio of head/anterior edges of pronotum/ widest point of pronotum/posterior edges of pronotum as 34:35:40:30. Anterior and posterior corners obtuse, markedly rounded. Lateral margins rounded. Anterior margin straight. Base slightly convex. Punctation rougher than on head, punctures almost confluent. Setae dense and long, three times as long as puncture diameter. – Elytra oval, 2.8 times as long, 1.6 times as wide as pronotum, widest in the middle; elytral length/width ratio as 110:62. Base markedly concave and wider than pronotal base (37:30). Each elytron with 10 rows of punctures; interval 9 forming rounded slightly obliquely directed humeral corner; all intervals gently arched, interval 9 keeled. Punctures of same size as on pronotum; distance between punctures in row 2 smaller than puncture diameter. Punctural interspaces with one row of long curved and erect setae: setae up to 4 times as long as puncture diameter. Punctures of each row also with one seta; these setae half as long as those on intervals, sometimes reduced on disk. Scutellum very small; scutellar row with three punctures; scutellar row vanishing after length of one fifth of width of elytral base. Epipleura with one row of punctures throughout whole length, confluent in a groove, punctures smaller than in row 10, largest in the middle, smaller towards apex. - Aedeagus (Fig. 32): length approximately 0.6 mm, with pairs of very small apical setae. - Abdomen: punctures dense and deep; first ventrite with punctures of same size as on middle of epipleura, distance between punctures half of puncture diameter; punctures gradually decreasing posteriorly from second ventrite on. Setae fine and long.

D i a g n o s i s: The habitus of this new species is most similar to *H. eutagenoides* from which is differs considerably by the wide elytral base relative to the pronotal base. It differs from all other species of the genus by the very long setae on the elytral intervals and by the presence of shorter setae in the punctural rows, which can be reduced on the disk.

R e m a r k s : In the studied material a few specimens from Nepal and one from Bhutan were also found, which I have identified as H. himalavica, but they are not included in type series. This is due to slight variations of specimens from different localities, including differences in the density and length of setae, and absence of the setae in punctural rows of the elytra, and in one specimen also in the colour of the body (black). More material from different localities are needed to decide their taxonomic status. However, these specimens surely do not belong to H. eutagenoides because of the width ratio of the elytral and pronotal base. - The specimen from Bhutan represents a new country record of the genus Herbertfranziella. This is the second genus and species of Stenosini known from Bhutan; the other is Tagenostola turkestanica albovillosa Koch, 1940 (KASZAB 1975b).

#### Herbertfranziella loebli n. sp. (Figs. 10, 24, 35)

H o l o t y p e ( $\Im$ ): India, Uttaranchal, Garhwal Himal, 2 km E Dhanaulti, 2250 m, 21.X.1979, leg. I. LÖBL, MHNG.

Paratypes: Same data as holotype, 2 ♀♀ MHNG, 1 ♂ SMNS. – India, Uttaranchal, 10 km E Mussoorie, 20 km NE Dehra Dun, 2000 m, 7.X.1996, leg. A. SCHULZ & K. VOCK, 2 ♀♀ CAPE. – India, 1863 (labelled: "63.47\*"), leg. J. BOWRING, 1 ♂ BMNH.

E t y m o l o g y : Named in honour of Dr. IVAN LÖBL, (Genève, Switzerland), collector of part of the type series.

Description: Body length 2.9-3.3 mm, body width 1.05–1.10 mm. – Body brown, legs and antennae lighter. Setae decumbent, short and fine. - Head length/width ratio as 39:38, head widest at a distance of half eye length before anterior margin of eyes. Tempora widest at posterior margin of eyes, then parallel to a distance half of eye length, then gently arched to cervix. Genae parallel from posterior third of eves forward to distance of half eve length before anterior margin of eye, than narrowed in a straight line to clypeus. From back third of eye length genae narrowed to posterior margin of eye. Clypeus straight. Two distinct impressions on frons. Ratio of head/cervix widths as 38:32. Eyes pronounced, completely divided by genae, dorsal side with about 11 facets, ventral side with about 8 facets. Punctation rounded, punctures almost confluent; punctural interspaces wrinkled. Setae light, 1.5 times as long as puncture diameter. - Antennae (Fig. 24): densely and lightly haired; setae on middle antennomeres as long as half length of antennomeres; antennomeres 2-11 combined twice as long as head width behind posterior margin of eyes; antennomeres club-shaped; last antennomere truncate latero-apically; length ratio of antennomeres 2-11 as 4.8:6:5:5:4.5:4.5:4.3:4.8:5:6.8, width ratio as 4:4: 4:4:4:4:4:4:5.3:5.3. – Pronotum longer than wide (46:43), widest at anterior third; width ratio of head/anterior edges of pronotum/widest point of pronotum/posterior edges of pronotum as 38:40:43:35. Anterior corners rectangular. Posterior corners obtuse and rounded. Lateral margins gently arched. Anterior margin straight. Base convex. Punctation same as on head; punctures almost confluent; with light forward directed setae, 1.5 times as long as puncture diameter. - Elytra markedly arched; 3.2 times as long, 1.9 times as wide as pronotum, widest in the middle; elytral length/width ratio as 146:80. Base markedly concave, wider than pronotal base (40:35). Each elytron with 10 rows of punctures; interval 9 forming distinct humeral corner; lateral margins markedly concave behind corners in dorsal view; all intervals gently arched, lateral intervals arched, interval 9 keeled. Punctures larger than on pronotum. Distance between punctures in row 2 equals half of puncture diameter. Punctural interspaces almost glazed, each interval with one row of very small punctures with light setae. Scutellum very small; scutellar row with three punctures; scutellar row vanishing after length of one fifth of width of elytral base. Epipleura with one row of punctures throughout whole length, punctures smaller than in

row 10, smaller towards apex. – Aedeagus (Fig. 35): length approximately 0.8 mm, with a very fine pair of apical setae. – Abdomen: punctures on ventrites 1 and 2 of same size as on base of epipleura, deep and almost confluent, on second to last ventrite punctures smaller.

D i a g n o s i s: This species differs from all congeners by the non-reduced dorsal part of the eyes. The elytra are almost twice as wide as the pronotum. The apex of the aedeagus is triangular.

#### 5 New genus Nepalofranziella and new species

#### Nepalofranziella n.gen.

Type species: Nepalofranziella kaszabi n. sp. by present designation.

Etymology: Combination of Nepal (where the new species were collected) and in honour of Prof. HERBERT FRANZ (with reference to the genus *Herbertfranziella*).

D i a g n o s i s : Body length 2.95–3.40 mm. Eyes completely divided by genae; tempora widest at posterior margin of eyes; two impressions on frons; pronotum without impression; elytra elliptical, with 10 rows of punctures, intervals flat or finely convex; elytra without humeral corners; intervals with setae erect and clavate, sometimes only on apex (Figs. 14, 15); base of elytra convex and as wide as pronotal base; epipleura with one row of punctures; all male tibiae with a small inner subapical tooth (Fig. 16) (female tibiae unknown); hindwings absent; aedeagus with setae on apex.

R e m a r k s: *Nepalofranziella* n. gen. belongs to the subtribe Dichillina of the tribe Stenosini. Its position in Dichillina is based on the eyes divided by genae (REIT-TER 1916). – *Nepalofranziella* is very similar to *Herbert-franziella* Kaszab, 1973. It differs by the equal width of pronotal and elytral base, absence of humeral corners and shape and position of setae on the elytra. *Nepalofranziella* n. gen. and *Herbertfranziella* differ from other related genera of the subtribe Dichillina (*Herbertfranzia* Kaszab, 1973, *Pseudethas* Fairmaire, 1896 and *Indochillus* Koch, 1941) by the shape of tempora, having reduced eyes, head without supraorbital keel, pronotum without impressions or keels and elytra without keels. – The genus *Nepalofranziella* is known only from two specimens representing two species.

Distribution: Nepal.

#### Nepalofranziella kaszabi n. sp. (Figs. 13, 14, 25, 36)

Holotype ( $\mathcal{E}$ ): Nepal, Kharkhore south, Pokhara, leg. H. FRANZ, HNHM.

Etymology: Named in honour of Dr. ZOLTÁN KASZAB (1915–1986), expert of Tenebrionidae who recognized 1985 this specimen as representing a new species.

Description: Body length 2.95 mm, body width 0.85 mm. - Body, legs and antennae rusty brown, palps lighter. Elytra with distinct erect vellow setae. - Head length/width ratio as 42:34, head widest at a distance of half eye length before anterior margin of eyes. Tempora almost parallel behind eve over a distance of one eve length, then gently narrowing towards the cervix, widest at posterior margin of eyes. Genae parallel, slightly widening from posterior margin of eyes to widest part of head, from there in a regular arch to clypeus. Clypeus rounded. Two distinct impressions on frons. Ratio of head/cervix widths as 34:24. Eves completely divided by genae, dorsal part with about 8 facets, ventral part with about 5 facets. Punctures on vertex coarse and rounded; punctures on frons half size as on vertex, almost confluent. Head with yellow, anteriorly directed setae 1.5 times as long as puncture diameter. - Antennae (Fig. 25): with short, light, decumbent hairs; setae on middle antennomeres as long as half length of antennomeres; antennomeres 2-11 combined twice as long as width of pronotum; antennomeres strong and trapezoidal; last antennomere truncate latero-apically; antennomeres 2-10 wider than long; length ratio of antennomeres 2-11 as 5:6:5.5:5:5:4.8:4:5:5.8:7, width ratio as 5.5: 6.5: 6.3: 5.8: 5.8: 5.5: 5.5: 5.8: 6.5: 5. - Pronotum heart-shaped, longer than wide (41:34), widest in the middle; width ratio of head/anterior edges of pronotum/widest point of pronotum/posterior edges of pronotum as 34:31:34:26. Anterior corners obtuse. Posterior corners obtuse. Anterior margin straight. Base concave. Punctures on pronotum larger and denser as on head, punctures almost confluent. Light setae of punctures anteriorly directed, twice as long as puncture diameter. - Elytra elliptical, 2.9 times as long, 1.9 times as wide as pronotum, widest in the middle; elytral length/width ratio as 120:64; base just as wide as base of pronotum. Base concave, without humeral corners. Each elytron with 10 rows of punctures; intervals flat, only lateral intervals somewhat convex. Punctures of same size as on pronotum; distance between punctures in row 2 equals one-third of puncture diameter. Punctural interspaces glossy. Punctural rows with setae as long as puncture diameter; intervals between punctures with a row of yellow, erect, flattened and apically expanded setae which are three times as long as the setae of the punctural rows (Fig. 14). Scutellum triangular; scutellar row small. Epipleura with one row of punctures getting smaller posteriad, at base smaller as in elytral row 10, in anterior third confluent in a groove. - Legs: all male tibiae with a small inner subapical tooth (female tibiae unknown). – Hindwings absent. – Aedeagus (Fig. 36): length approximately 0.64 mm, with tiny apical setae. - Abdomen: punctures on ventrite 1 fine, distance between punctures twice as wide as puncture diameter, ventrites 2 and 3 with larger and deeper punctures than ventrite 1, distance between punctures equals puncture diameter.

Diagnosis: This species is distinctive in having thick antennal antennomeres 2-10 which are wider than long. Setae on elytral intervals erect and clavate. Length ratio of body/aedeagus as 4.6:1.

#### Nepalofranziella schawalleri n. sp. (Figs. 12, 15, 16, 26, 37)

Holotype (♂): Nepal, Prov. Bheri, Distr. Surkhet, N Surkhet, 1600–2000 m, 28.V.1998, leg. W. SCHAWALLER, SMNS.

Etymology: Named in honour of Dr. WOLFGANG SCHA-WALLER (Stuttgart, Germany), expert of Tenebrionidae and collector of the holotype.

Description: Body length 3.4 mm, body width 1.1 mm. - Body brown, legs, antennae and palps lighter. Elytra with decumbent yellow setae, on apex erect. - Head length/width ratio as 47:37, head widest at a distance of half eve length before anterior margin of eves. Tempora almost parallel behind eye over a distance of one and half eve length, then gently narrowing towards the cervix. Genae from posterior margin of eyes slightly widening in a straight line to widest part of head, then arched and narrowing in a straight line to clypeus. Clypeus straight. Two impressions on frons. Ratio of head/cervix widths as 37: 32. Eyes completely divided by genae, dorsal part with about 7 facets, ventral part with about 6 facets. Punctation on vertex coarse, punctures almost confluent. Punctural interspaces wrinkled. Head with fine, light, anteriorly directed setae twice as long as puncture diameter. - Antennae (Fig. 26): with light, fine hairs; setae on middle antennomeres as long as half length of antennomeres; antennomeres 2-11 combined 3 times as long as width of pronotal base; antennomeres elongate trapezoidal; last antennomere truncate latero-apically; length ratio of antennomeres 2–11 as 3.8:6:4.8:4.3:4.3:4.8:4.3:4.8:6.5, width ratio as 3.8:4.3:4:3.8:3.8:3.8:3.8:4:4.5:4.3. - Pronotum longer than wide (46:42), widest at anterior quarter; width ratio of head/anterior edges of pronotum/widest point of pronotum/posterior edges of pronotum as 37:33:42:31. Anterior corners obtuse and rounded. Posterior corners obtuse. Lateral margins slightly rounded, from widest part to base almost straight. Anterior margin almost straight. Base gently concave. Punctures on pronotum of same size as on vertex. Punctural interspaces wrinkled. Light setae of punctures anteriorly directed, twice as long as puncture diameter. - Elytra elliptical, 3.3 times as long, 1.9 times as wide as pronotum, widest in the middle; elytral length/ width ratio as 150:80; base just as wide as base of pronotum. Base distinctly concave, without humeral corners. Each elytron with 10 rows of punctures; intervals finely convex, lateral intervals convex, interval 10 flattened. Punctures larger and deeper as on pronotum; distance between punctures in row 2 equals half of puncture diameter. Punctural interspaces gently wrinkled. Each interval with one row of yellow setae twice as long as puncture diameter, setae erect and slightly clavate on apical declivity (Fig. 15). Scutellum very small; scutellar row small. Epipleura with one row of punctures getting smaller posteriad, diameter at base smaller as in row 10. - Legs: all male tibiae with a small inner subapical tooth (Fig. 16) (female tibiae unknown). - Hindwings absent. - Aedeagus (Fig. 37): length approximately 1.15 mm, with tiny apical setae. - Abdomen: punctures on ventrite 1 smaller than on epipleura, distance between punctures equal to puncture diameter; ventrite 2 with punctures of same size as on ventrite 1, distance between punctures half of puncture diameter. Punctures smaller towards last ventrite.

Diagnosis: This species is distinguished from the former by the long, thin antennae, with antennomeres 2-10 longer than wide. Setae on elytral intervals slightly clavate only at the apex. Length ratio of body/aedeagus as 3:1.

#### 6 Previously known species of Herbertfranzia

Herbertfranzia nepalica Kaszab, 1973 (Figs. 11, 27, 38)

Herbertfranzia (Herbertfranzia) nepalica Kaszab, 1973 – KASZAB 1973: 28.

Herbertfranzia nepalica - MEDVEDEV 1994: 864.

Studied type material: Nepal, Barahbise Distr., Ting Sang La, leg. H. FRANZ, 1 paratype HNHM, 1 paratype MNHN.

New material: E Nepal, Thamur Valley, Dhankuta, 1150 m, 23.V.1983, leg. M. BRANCUCCI, 1 ex. SMNS. - Nepal, Gorkha/Dhading Distr., Buri Gandaki, Jagat opposite Pangshing, 1650 m, farmland, 31.VII.1983, leg. J. MARTENS & W. SCHA-WALLER, 1 ex. SMNS. - Nepal, Dhading Distr., Thorpu to Kordunje, 1300-1400 m, 24.VII.1983, leg. J. MARTENS & W. SCHAwaller, 1 ♀ SMNS. – Nepal, Kosi, from Mangmaya (27°07'N, 87°15'E, 300 m) to Akibunkybeshi (27°12'N, 87°15'E, 400 m), 30.V.2001, NHMB expedition to Nepal, code 5, 8 ex. NHMB.

Distribution: Nepal.

#### 7 Keys to the species of Herbertfranziella, Nepalofranziella and allied genera

#### Key to genera

1 Suborbital keels prominent. Anterior margin of clypeus concave, with small tooth (occasionally only slightly concave, without a tooth)......Indochillus

- Suborbital keels reduced or absent. Anterior margin of

- 3 Pronotum with a midlongitudinal impression (occasionally only very slightly developed). Elytral base considerably wider than pronotal base. Elytra parallel-sided. Middle and posterior male tibiae with apical tooth on inner side.....
- Pronotum without median impression. Elytral base hardly wider than pronotal base. Elytra oval. All male and female tibiae without apical tooth on inner side........Herbertfranzia
- 4 Base of elvtra wider than base of pronotum (sometimes only slightly); interval 9 of elytra forming humeral corner. ......Herbertfranziella

- Base of elvtra as wide as base of pronotum; interval 9 of elytra not forming humeral corner... Nepalofranziella n. gen.

#### Genus Herbertfranziella

1	Dorsal part of eyes not considerably reduced, consisting of
	eleven facets. Aedeagus see Fig. 35. Body length 2.9–3.3 mm.
	– Figs. 10, 24, 35loebli n. sp.
-	Dorsal part of eyes considerably reduced, consisting of less
_	than eight facets
2	Humeral corners sharp. Antennomeres trapezoidal. Aedeagus
	see Fig. 29. Body length 2.75–2.9 mm. – Figs. 3, 18, 29
	bhimtaleica n. sp.
_	Humeral corners rounded. Antennomeres club-shaped 3
3	Base of elytra slightly wider than pronotal base. Elytra only
	2.8 times as long as pronotum. Aedeagus see Fig. 31. Body
	length 2.4–2.7 mm. – Figs. 5, 20, 31eutagenoides
_	Base of elytra markedly wider than pronotal base
4	Pronotum longer than wide
_	Pronotum shorter than wide
5	Genae widest before anterior margin of eyes, then angular
	to clypeus. Rows of punctures on elytra coarse, punctures in
	rows almost confluent. Aedeagus see Fig. 28. Body length
	2.7–2.8 mm. – Figs. 2, 17, 28almorensis n. sp.
_	Genae almost parallel from posterior margin of eyes, then
	arched to clypeus. Punctures in rows on elytra not confluent.
6	Lateral margins of pronotum slightly concave before poste-
	rior corner, anterior margin straight. Aedeagus see Fig. 30.
	Body length 2.5–3.05 mm. – Figs. 4, 19, 30 <i>brancuccii</i> n. sp.
_	Lateral margins of pronotum rounded, anterior margin
	slightly concave at corners, convex in the middle. Aedeagus
	see Fig. 34. Body length 2.7–3.2 mm. – Figs. 7, 23, 34
7	Elytra almost parallel-sided in the middle third. Anterior cor-
	ners of pronotum slightly protruding. Aedeagus see Fig. 33.
	Body length 2.25–2.85 mm. – Figs. 8, 9, 22, 33 <i>ianushevi</i>
_	Elytra oval. Anterior corners of pronotum not protruding. Ae-
	deagus see Fig. 32. Body length 2.4–2.9 mm. – Figs. 6, 21,

## 32. .....himalayica n. sp. Genus Nepalofranziella

1 Antenna (antennomeres 2–11 combined) twice as long as width of pronotum, antennomeres thick and trapezoidal, antennomeres 2-10 wider than long. Setae on elytra 3 times as long as puncture diameter, flattened and distinctly clavate Antenna (antennomeres 2–11 combined) 3 times as long as width of pronotal base, antennomeres elongate trapezoidal, antennomeres 3–11 longer than wide. Setae on elytra twice as long as puncture diameter, erect, but only slightly clavate on apical declivity (Fig. 15) Aedeagus length 1.15 mm (Fig. 37.). Body length 3.4 mm. – Figs. 12, 15, 16, 26, 37).

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