Some new Oriental *Edaphus* MOTSCHULSKY, mainly from Vietnam (Coleoptera, Staphylinidae) 119th Contribution to the Knowledge of Euaesthetinae

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A b s t r a c t : Descriptions of 10 new species of the genus *Edaphus* MOTSCHULSKY, mainly from Vietnam: *Edaphus acupunctatus* nov.sp., *E. bisulcaticollis* nov.sp., *E. boopoides* nov.sp., *E. carinulifrons* nov.sp., *E. hermani* nov.sp., *E. incisionicollis* nov.sp., *E. latipennis* nov.sp., *E. nodifrons* nov.sp., *E. scrobiculicollis* nov.sp. (all from Vietnam) and *E. lineationifer* nov.sp. (Nepal), including some new records for Vietnam.

K e y w o r d s : Coleoptera, Staphylinidae, *Edaphus*, new species, Vietnam, Nepal.

Introduction

The Euaesthetine genus *Edaphus* MOTSCHULSKY is mainly distributed in the Southern hemisphere, most species are known from the Oriental region. At present we are only beginning to record the species living here. In this paper I present 10 new species, 9 from Vietnam, 1 from Nepal.

Material and methods

The morphological studies were carried out using a stereoscopic microscope (Leitz) and a Carl Zeiss compound microscope. Measurements have been taken through the binocular (1 unit = 0.0085 mm). The genitalia are embedded in Euparal (soluble in alc. abs.).

The following acronyms are used (see e. g. fig. 1)

alfF = antero-lateral furrows of frons; alpF = antero-lateral portions of frons; ampF = antero-median portion of frons; bf = basal foveae of the pronotum; DE = distance between eyes; dlbc = distance of the latero-basal carinae of the pronotum; E = aedeagus; EL: greatest length of elytra; EW = greatest width of elytra; ha = honeycomb-like attachment sites of muscles; HT = holotype; lbc = latero-basal carinae of the pronotum; lbf = latero-basal foveae of the pronotum; LE = length of eyes; mbc = medio-basal carina of the pronotum; LG = length of genae; LT = length of temples; mbf = medio-basal fovea of the pronotum; mbct3 = medio-basal carina of tergite 3; PL = length of pronotum; PM

= proportional measurements (1 unit = 0.0085 mm); PT/T = paratype/s; ptfF = posterotransverse furrow of frons; PW = width of pronotum; SL = length of suture; SpP = sperm pump; vs = vesica seminalis.

The material referred to below is deposited in the following public institutions and private collections:

AMNH	American Museum of Natural History, New York
cP	.coll. Puthz (in the SMNS)
	.Museum für Tierkunde, Dresden
SMNS	Staatliches Museum für Naturkunde, Stuttgart

Taxonomic results

Edaphus nodifrons nov.sp. (figs 6, 7)

T y p e m a t e r i a l : <u>Holotype</u> (δ) and 1 δ -paratype: <u>VIETNAM</u>: Hatinh Prov., Raô An, 13 km W Huang Son, rt. 8 7 km S Nuòc Sôt village, 18°21'N, 105°15'E, 300m, flight interception trap, 9.-22.V.1998, Lee Herman: in the AMNH.

D e s c r i p t i o n : Macropterous, light brown, moderately shiny, head moderately finely, pronotum finely, densely punctate, elytra very shallowly granulose, pubescence recumbent.

Length: 1.0mm (fore body: 0.55mm).

PM of the ht: HW: 23; DE: 15; LE: 7; LT: 1; LG: 2.5; PW: 24; PL: 22: dlbc: 16; EW: 36; EL: 32; SL: 25.

M a l e : Sternite 8 (fig. 7). Sternite 9 acute apicomedially, with two fields of about 9 ha. SpP tubular, about 1.5x as long as the aedeagus, vs? Aedeagus (fig. 6).

Head narrower than pronotum, eyes large, moderately coarsely facetted, temples very short, ptfF and alfF distinct, ampF about as broad as each of the alpF, distinctly (moderately) elevated, completely margined by the convergent alfF anteriorly, separated from clp by a transverse ridge; frons, except median "knob" extremely finely punctate/sculptured. Antennae very short, when reflexed extending to about the middle of the pronotum, club 2-segmented, segment 10 broader than long. Pronotum broader than long, sides convex anteriorly, strongly constricted behind, lbc and mbc (extending to base proper) distinct, 4-6 bf present; punctuation fine and very dense, punctures nearly as coarse as eye facets, interstices less than diameter of punctures. Elytra broader than long, slightly widened behind, sides slightly convex, shoulders simple, surface not smooth but densely and shallowly granulose. Mbct3 very short, much shorter than half the tergite.

C o m p a r a t i v e n o t e s : In my key to the Oriental *Edaphus* (PUTHZ 1979b) this new species should be inserted at column 130. From *E. puncticollis* PUTHZ it may be easily distinguished by the smaller size, much finer pronotal punctuation and the elevated ampF.

E t y m o l o g y : Since the ampf has a distinct elevation I name this species "*nodifrons*" (Lat.= with a "knob" on frons).

Edaphus latipennis nov.sp. (figs 5, 10)

T y p e m a t e r i a l : <u>Holotype</u> (δ) and 1 δ -paratype: <u>VIETNAM</u>: Hatinh Prov., Raô An, 13 km W Huang Son, rt. 8 7 km S Nuòc Sôt village, 18°21'N, 105°15'E, 300m, flight interception trap, 9.-22.V.1998, Lee Herman: in the AMNH.

D e s c r i p t i o n : Macropterous, chestnut brown, moderately shiny, Pronotum and elytra punctate, pubescence recumbent.

Length: 1.4-1.5mm (fore body: 0.9mm).

PM of the ht: HW: 38; DE: 24; LE: 12; LT: -; IG: 1.5; PW: 43; PL: 36; dlbc: 31; EW: 62; EL: 59; SL: 50.

M a l e : Sternite 8 (fig. 10). Sternite 9 acute apicomedially, no fields of ha. SpP tubular, about twice as long as the median lobe, vs about as large as apical portion of the median lobe. Aedeagus (fig. 5).

Head narrower than pronotum, eyes large, finely facetted, no temples, ptfF and (short) alfF distinct, ampF nearly twice as broad as each of the alpF, flat, no apical separation between ampF and clp, alpF moderately elevated with a distinct impression anteriorly. Antennae when reflexed not extending to the posterior margin of pronotum, club 2-segmented, segment 10 slightly longer than broad. Pronotum broader than long, sides moderately convex anteriorly, distinctly constricted behind, lbc distinct, no mbc, 6 indistinctly delimited bf amongst the dense punctuation present; punctuation coarse and dense, diameter of punctures about as large as basal cross section of antennal segment 3, interstices less than half diameter of punctures. Elytra very large, broader than long, sides moderately broadened behind, slightly convex, shoulders simple; punctuation much finer than that on pronotum, dense, punctures about as large as eye facets, interstices about as wide as diameter of punctures. Mbct3 nearly as long as the tergite.

C o m p a r a t i v e n o t e s : In my key to the Oriental *Edaphus* (PUTHZ 1979b) this new species should be inserted at column 190. From *E. strangulatus* CAMERON it may be distinguished by the size (*E. strangulatus*: 1.1-1.3mm), the very densely punctate pronotum (also in basal quarter) and 6 bf. From *E. feai* PUTHZ which also runs at column 190 it may be distinguished by smaller size (*E. feai*: 1.6-1.9mm), impunctate frons and finer elytral punctuation, from both by the aedeagus.

E t y m o l o g y : Because of the large elytra I name this species "*latipennis*" (Lat.= with large elytra).

Edaphus boopoides nov.sp. (figs 4, 13)

T y p e m a t e r i a l : <u>Holotype</u> (δ) and $2\delta \delta$ -paratypes: <u>VIETNAM</u>: Hatinh Prov., Raô An, 13 km W Huang Son, rt. 8 7 km S Nuòc Sôt village, 18°21'N, 105°15'E, 300m, flight interception trap, 9.-22.V.1998, Lee Herman: HT and 1 pt in the AMNH, 1 pt in cP.

D e s c r i p t i o n : Macropterous, light brown, shiny, Pronotum distinctly punctate, elytra except setiferous punctures impunctate, pubescence recumbent.

Length: 1.2-1.4mm (fore body: 0.7-0.8mm).

PM of the ht: HW: 41; DE: 26; LE: 12; LT: -; LG: 1.5; PW: 40; PL: 34; dlbc: 30; EW: 64; EL: 55; SL: 45.

M a l e : Sternite 8 (fig. 13). Sternite 9 acute apicomedially, no fields of ha. SpP tubular, about twice as long as the median lobe, vs as large as apical portion of the median lobe. Aedeagus (fig. 4).

Head slightly broader than pronotum (!), eyes very large, moderately coarsely facetted, no distinct temples, ptfF and (short) alfF distinct, ampF broader than each of the alpF, flat, no special separation between ampF and clp, alpF with a few distinct punctures. Antennae moderately slender, when reflexed slightly extending beyond the posterior margin of the pronotum, club 2-segmented, segment 10 distinctly somewhat longer than broad. Pronotum broader than long, sides convex anteriorly, constricted behind, lbc distinct, mbc not extending to base proper, 4-6 bf present; punctuation fine and moderately dense, punctures nearly as large as eye facets, interstices (mostly) wider than diameter of punctures. Elytra broader than long, sides moderately broadened, slightly convex, shoulders simple; setiferous punctures dense, interstices distinctly wider than punctures. Mbct3 shorter than half the tergite.

C o m p a r a t i v e n o t e s : This new species is remarkable the broad head with very large eyes. In my key (1979b) it should be inserted at column 186; from both, *E. cameroni* PUTHZ and *E. dentiventris* FAUVEL it may be easily distinguished by the broad head.

E t y m o l o g y : Because of the large eyes I name this species "*boopoides*" (Lat.= with cow-like eyes).

Edaphus scrobiculicollis nov.sp.

T y p e m a t e r i a l : <u>Holotype</u> (φ):<u>VIETNAM</u>: Hatinh Prov., Raô An, 13 km W Huang Son, rt. 8 7 km S Nuòc Sôt village, 18°21'N, 105°15'E, 300m, flight interception trap, 9.-22.V.1998, Lee Herman: in the AMNH.

D e s c r i p t i o n : Macropterous, chestnut brown, shiny, impunctate, pubescence inconspicuous, recumbent.

Length: 1.2-1.3mm (fore body: 0.8mm).

PM of the ht: HW: 34.5; DE: 23; LE: 9.5; LT: 2; LG: 3; PW: 39.5; PL: 34; dlbc: 26; EW: 54; EL: 48; SL: 38.

M a l e : Unknown.

Head narrower than pronotum, eyes large, finely facetted, temples distinct, ptfF and alfF distinct, ampF as broad as each of the callus-like elevated alpF, convex/distinctly elevated, no special separation between ampF and clp, alpF with a distinct impression anteriorly. Antennae moderately long, when reflexed not extending to the posterior margin of the pronotum, club 2-segmented, segment 10 distinctly broader than long. Pronotum broader than long, sides strongly convex anteriorly, strongly constricted behind, lbc and mbc (extending to base proper) distinct, 4-6 bf present; mbf elongated anteriad nearly toward the middle of pronotum; a distinct fovea in the disc medially in each pronotal half. Elytra large, broader than long, sides moderately broadened, slightly convex, shoulders simple. Mbct3 shorter than half the tergite.

C o m p a r a t i v e n o t e s : This new species resembles *E. bipunctatus* PUTHZ from Vietnam, but may be distinguished by the shorter mbf, 4-6 bf, longer elytra and the pronotal foveae, which are placed in the middle of each half of the pronotum (not in the actual middle of the pronotum as in *E. bipunctatus*). The species resembles also *E. biimpressus* PUTHZ from Vietnam, but is more robust and has shorter elytra. In my key (1979b) it should be inserted at column 80; from *E. fossicollis* PUTHZ it may be easily distinguished by the smaller size.

E t y m o l o g y : Because of the small foveae in the middle of the pronotum I name this species "*scrobiculicollis*" (Lat.= with foveae on pronotum).

Edaphus acupunctatus nov.sp. (figs 3, 9)

T y p e m a t e r i a l : <u>Holotype</u> (δ): <u>VIETNAM</u>: Hatinh Prov., Raô An, 13 km W Huang Son, rt. 8 7 km S Nuòc Sôt village, 18°21'N, 105°15'E, 300m, flight interception trap, 9.-22.V.1998, Lee Herman: in the AMNH.

D e s c r i p t i o n : Macropterous, reddish brown, nearly dull, forebody densely punctate, pubescence recumbent.

Length: 1.1mm (fore body: 0.65mm).

M a l e : Sternite 8 (fig. 9). Sternite 9 acute apicomedially, with some scattered ha. SpP tubular, nearly twice as long as the median lobe, with a short distal trumpet, vs small, about as large as half of the apical portion of the median lobe. Aedeagus (fig. 3), parameres much shorter than median lobe, with 1 apical seta.

Head narrower than pronotum, eyes very large, finely facetted, no distinct temples, ptfF and alfF distinct, ampF broader than each of the moderately elevated alpF, flat, no special separation between ampF and clp, posteromedian portion of frons densely punctate, ampF also punctate, but punctures slightly less coarse. Antennae short, when reflexed not extending to the posterior margin of the pronotum, club 2-segmented, segment 10 broader than long. Pronotum broader than long, sides convex anteriorly, strongly constricted behind, lbc and mbc (extending to base proper) distinct, 6 bf present; punctuation moderately coarse and very dense, punctures larger than eye facets, interstices less than half diameter of punctures. Elytra longer than broad, subquadrate, sides slightly convex, shoulders simple, punctuation as coarse and as dense as on pronotum. Mbct3 as long as the tergite.

C o m p a r a t i v e n o t e s : This new species resembles strongly *E. densipennis* Cameron, but may be distinguished by larger eyes and the punctate frons. In my key (1979b) it should be inserted at column 119; from *E. punctulatus* PUTHZ it may be distinguished by the smaller size, punctate frons, narrower elytra and the aedeagus with much shorter parameres.

E t y m o l o g y : Because of the distinct punctuation I name this species "*acupunc-tatus*" (Lat.= distinctly punctate).

Edaphus carinulifrons nov.sp. (figs 2, 8)

T y p e m a t e r i a l : <u>Holotype</u> (δ):<u>VIETNAM</u>: Hatinh Prov., Raô An, 13 km W Huang Son, rt. 8 7 km S Nuòc Sôt village, 18°21'N, 105°15'E, 270m, litter near forest stream, 30.IV.1998, Lee Herman: in the AMNH.

D e s c r i p t i o n : Macropterous, reddish brown, moderately shiny, impunctate, pubescence recumbent.

Length: 1.0mm (fore body: 0.6mm).

PM of the ht: HW: 27; DE: 18.5; LE: 8; LT: 2.5; LG: 5; PW: 29.5; PL: 27; dlbc: 21; EW: 48; EL: 40; SL: 32.

M a l e : Sternite 8 (fig. 8). Sternite 9 acute apicomedially, with 2 fields of about 14 ha. SpP large, twice as long as the aedeagus, with a double trumpet (similar to that of *E. simulator* PUTHZ: PUTHZ 2003, fig. 3), no vs. Aedeagus (fig. 2).

Head slightly narrower than pronotum, eyes large, finely facetted, temples distinct, ptfF and alfF distinct, ampF about as broad as each of the alpF, with a narrow elevated carina, no distinct separation between ampF and clp, alpF each with 2 impressions (not carinate!). Antennae short, when reflexed not extending to the base of the pronotum, club 2-segmented, segment 10 slightly broader than long. Pronotum slightly broader than long, sides convex anteriorly, constricted behind, lbc distinct, elongated anteriad forming a very narrow longitudinal furrow extending to about the middle of pronotum; mbc extending to base proper, 6 distinct bf present; middle of pronotum with a narrow longitudinal incision/furrow, separate from the anterior margin of the pronotum by about the length of antennal segment 11. Elytra broader than long, sides slightly convex, slightly broaders simple. Mbct3 about ¹/₄ as long as the tergite.

C o m p a r a t i v e n o t e s : This new species belongs to the group of *E. cinghalicus* COMELLINI. It resembles this species strongly but may be distinguished at once by the non-carinate alpF and the narrower median carina of ampF. From *E. philippinus* BERNHAUER it may be distinguished by the distinct median furrow of the pronotum. In my key (1979b) it should be inserted at column 83.

E t y m o l o g y : Because of the carinated frons I name this species "*carinulifrons*" (Lat.= with a tiny carina of frons).

Edaphus hermani nov.sp. (figs 11, 12)

T y p e m a t e r i a 1: <u>Holotype</u> (δ) and 1 δ -paratype: <u>VIETNAM</u>: Hatinh Prov., Raô An, 13 km W Huang Son, rt. 8 7 km S Nuòc Sôt village, 18°21'N, 105°15'E, 300m, flight interception trap, 9.-22.V.1998, Lee Herman: in the AMNH.

D e s c r i p t i o n : Macropterous, reddish brown, moderately shiny, pronotum and elytra densely, moderately coarsely punctate, pubescence recumbent.

Length: 1.3-1.4mm (fore body: 0.8mm).

PM of the ht: HW: 39; DE: 27; LE: 10; LT: -; LG 2; PW: 44; PL: 35; dlbc: 31; EW: 60; EL: 54; SL: 41.

M a l e : Sternite 6 with a shallow apical emargination, sternite 7 with a slightly deeper apical emargination, Sternite 8 (fig. 12), Sternite 9 acute apicomedially, with two fields with about 14 ha. SpP tubular, about 1.5x as long as the aedeagus, vs smaller than apical portion of the median lobe. Aedeagus (fig. 11), apical portion acutely angled, parameres much shorter than median lobe, with a long apical and a long subapical seta.

Head narrower than pronotum, eyes large, finely facetted, temples indistinct, ptfF and convergent alfF distinct, ampF as broad as each of the alpF, moderately callus-like elevated, anteriorly margined by convergent alfF, no sharp separation between ampF and clp. Antennae moderately long, when reflexed not extending to the posterior margin of the pronotum, club 2-segmented, segment 10 broader than long. Pronotum much broader than long, sides moderately convex anteriorly, strongly constricted behind, lbc distinct. mbc extending to base proper, 4-6 indistinctly delimited bf present; punctuation coarse and very dense (also behind bf), diameter of punctures about as large as median cross section of antennal segment 3, interstices much less than half diameter of punctures except on a minute area in anterior middle. Elytra trapeziform, much broader than long, sides moderately broadened, shoulders simple; punctuation distinctly less coarse than that on pronotum, dense, punctures larger than eye facets, interstices nearly as wide as diameter of punctures. Mbct3 shorter than half the tergite.

C o m p a r a t i v e n o t e s : This new species resembles closely *E. punctatus* FAUVEL, but may be distinguished by the impunctate frons, the slightly less coarse elytral punctuation, shorter antennal segment 10 (in *E. punctatus* it is longer than broad) and the aedeagus (PUTHZ 1979b, fig. 8). In my key (1979b) it should be inserted at column 109; from *E. rivalis* PUTHZ, which is also relatively similar, it may be distinguished by the densely punctate base of the pronotum.

E t y m o l o g y : This new species is warmly dedicated to the collector Lee H. Herman (New York).

Edaphus lineationifer nov.sp.

T y p e m a t e r i a l : <u>Holotype</u> (φ) : <u>NEPAL</u>: Annapurna Mountains, Telbrung Danda near Gangpokhara, 2700m, 12./13.VI.1997, O. Jäger: in the MTD.

D e s c r i p t i o n : Micropterous, reddish brown, shiny, frons distinctly, pronotum very finely punctate, pubescence recumbent.

Length: 1.6mm (fore body: 0.9mm).

PM of the HT: HW: 40; DE: 32; LE: 9; LT: -; LG: 3; PW: 48; PL: 41; dlbc: 32; EW: 63; EL: 47; SL: 38.

M a l e : Unknown.

Head distinctly narrower than pronotum, eyes moderately coarsely facetted, moderate in size, no distinct temples, ptfF missing, alfF distinct, short, ampF as broad as each of the alpF, convex, no distinct separation between ampF and clp, the whole frons distinctly punctate, punctures slightly smaller than eye facets, interstices wider than punctures. Antennae moderately long, when reflexed nearly extending to the posterior margin of the pronotum, club 2-segmented, segment 10 distinctly broader than long. Pronotum broader than long, sides slightly convex anteriorly, strongly constricted behind, lbc distinct, mbc extending to base proper, 6 bf present; mbc very narrowly elongated anteriad, separate from anterior margin of pronotum by about one eye length; beside the elongates mbc there can be seen extremely narrow longitudinal furrows; furthermore there are two short transverse, narrow furrows in about the middle of pronotum between mbc and anterior ends of lbc; punctuation on disc very fine, sparse, interstices about twice as wide as punctures. Elytra trapeziform, much broader than long, shoulders simple, minute setiferous punctures sparse, interstices more than 3x as wide as minute punctures. Mbct3 short, less long than half the tergite.

C o m p a r a t i v e n o t e s : This new species is the sister species of *E. lineolatus* PUTHZ, from which it may be distinguished by distinct (coarser) punctuation of frons, finely punctate pronotum, sparser elytral punctuation (in *E. lineolatus* interstices between minute setiferious punctures are about twice as wide as punctures) and by the shorter mbct3 (in *E. lineolatus* mbct3 extends to the posterior margin of the tergite). Because of the short elytra this new species should be inserted in my key (1979b) at column 38; from E. *fossicollis* PUTHZ it is at once distinguished by the 6 much smaller bf and the punctate frons.

E t y m o l o g y : Because of the thread like longitudinal furrows of the pronotum I name this species "*lineationifer*" (Lat.= with lines on the pronotum).

Edaphus incisionicollis nov.sp.

T y p e m a t e r i a l : <u>Holotype</u> (φ):<u>VIETNAM</u>: Hatinh Prov., Raô An, 13 km W Huang Son, rt. 8 7 km S Nuòc Sôt village, 18°21'N, 105°15'E, 300m, flight interception trap, 9.-22.V.1998, Lee Herman; Paratypes: 1 φ : ibidem, 220m, litter as base of boulders in forest, 6.V.1998, L. Herman; 1 φ Hatinh Prov., Ke Co Reservoir, 18°09'N, 105°55'E, 12.IV.1998, L. Herman: HT and 1 pt in the AMNH, 1 pt in cP.

D e s c r i p t i o n : Large, macropterous, chestnut brown, shiny, impunctate, pubescence dense, semierect.

Length: 2.0-2.6mm (fore body: 1.1-1.3mm).

PM of the ht: HW: 49; DE: 38; LE: 12: LT: -; LG: 3; PW: 59; PL: 54; dlbc: 43; EW: 83; EL: 75: SL: 61.

M a l e : Unknown.

Head distinctly narrower than elytra, eyes large, finely facetted, no distinct temples, ptfF and (short) alfF distinct, ampF nearly twice as broad as each of the alpF, flat, not distinctly separated from clp, alpF nodiform, each with one minute punctures, few minute punctures near alfF anteromedially. Antennae long, when reflexed extending to the posterior margin of the pronotum, club 2-segmented, segment 10 distinctly, but not much, longer than broad. Pronotum broader than long, sides convex anteriorly, strongly constricted behind, lbc distinct, mbc extending to base proper, 6 large bf present; along the middle of the pronotum there can be seen a strong, narrow incision/furrow, which is separated from the anterior margin of the pronotum by the length of antennal segment 3. Elytra very large, broader than long, sides moderately convex, shoulders simple. Tergite 3 and 4 with long mbc, mbct5 longer than half of the tergite.

C o m p a r a t i v e n o t e s : In my key (1979b) this remarkable new species should be inserted at column 83; from *E furcaticollis* PUTHZ it may be easily distinguished by the median carinae of tergites 3-5 and the size.

E t y m o l o g y : Because of the narrow longitudinal furrows of the pronotum I name this species "*incisionicollis*" (Lat.= with an incision on pronotum).

Edaphus bisulcaticollis nov.sp.

T y p e m a t e r i a l : <u>Holotype</u> (φ):<u>VIETNAM</u>: Hatinh Prov., Raô An, 13 km W Huang Son, rt. 8 7 km S Nuòc Sôt village, 18°21'N, 105°15'E, 300m, flight interception trap, 9.-22.V.1998, Lee Herman: in the AMNH.

D e s c r i p t i o n : Macropterous, light brown, shiny, impunctate, pubescence recumbent.

Length: 1.0mm (fore body: 0.55mm).

PM of the ht: HW: 23.5; DE: 15; LE: 7.5; LT: 1.5; LG: 3.5; PW: 25; PL: 24; dlbc: 19; EW: 37; ELK: 34; SL: 27.

M a l e : Unknown.

Head slightly narrower than pronotum, eyes large, finely facetted, restricted temples short, ptfF and alfF distinct, ampF about as broad as each of the alpF, slightly convex, no distinct separation between ampF and clp, alfF slightly broadened behind, a narrow transverse impression anteriorly. Antennae short, when reflexed not extending to the posterior margin of the pronotum, club 2-segmented, segment 10 broader than long. Pronotum distinctly broader than long, sides evenly convex anteriorly, strongly con-

stricted behind, with distinct (not elongated) lbc, mbc extending to base proper, 6 small bf present; mbf elongated anteriad and slightly broadened (Y-shaped), extending to the anterior fifth of the pronotum, mbf near mbc elongated anteriad forming a very narrow longitudinal furrow. Elytra broader than long, sides moderately convex, shoulders simple. Mbct3 about as long as half of the tergite.

C o m p a r a t i v e n o t e s : This new species should belong to the *E. dissimilis* group (PUTHZ 2010: 266). It resembles some Taiwanese species. From *E. peitawumontis* PUTHZ it may be distinguished by the shorter lbc, 6 bf and longer mbct3. In my key (1979b) it should be inserted at column 88; from *E. plicifer* PUTHZ it may be distinguished by the broader head, the different outline of the less broad pronotum and the Y-shaped elongated mbc.

E t y m o l o g y : Because of the two longitudinal sulci of the pronotum I name this species "*bisulcaticollis*" (Lat.= with two sulci on pronotum).

Further records from the flight interception trap at VIETNAM: Hatinh Prov., Raô An, 13 km W Huang Son, rt. 8 7 km S Nuòc Sôt village, 18°21'N, 105°15'E, 300m, 9.-22.V.1998, Lee Herman:

Edaphus annamensis PUTHZ, 19 Exx.

Edaphus granulipennis PUTHZ, 2 Exx.

Edaphus imitator PUTHZ, 58 Exx.: first record from Vietnam

Edaphus planus PUTHZ, 3 Exx.

Edaphus puncticollis PUTHZ, 13 Exx., first record for Vietnam.

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Zusammenfassung

In dieser Arbeit werden 10 neue orientalische *Edaphus*-Arten beschrieben: *Edaphus acupunctatus* nov.sp., *E. bisulcaticollis* nov.sp., *E. boopoides* nov.sp., *E. carinulifrons* nov.sp., *E. hermani* nov.sp., *E. incisionicollis* nov.sp., *E. latipennis* nov.sp., *E. nodifrons* nov.sp., *E. scrobiculicollis* nov.sp. (alle ausVietnam) und *E. lineationifer* nov.sp. (Nepal) und neue Meldungen aus Vietnam mitgeteilt.

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Figs 1-13: Head and pronotum with acronyms (see text) (1), aedeagi (2-6, 11), Sternite 8 of male (7-10, 12, 13) of *Edaphus carinulifrons* nov.sp. (2, 8), *E. acupunctatus* nov.sp. (3, 9), *E. boopoides* nov.sp. (4, 13), *E. latipennis* nov.sp. (5, 10), *E. nodifrons* nov.sp. (6, 7) and *E. hermani* nov.sp. (11, 12).- Scale = 0.1mm.

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