

New and interesting Chrysomelidae (Insecta: Coleoptera) from the collection of the Naturkundemuseum Erfurt

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Abstract

Lema arndti (Burundi), *Smaragdina pseudodivisa*, *Colaspoides serratipes*, *Mimastra nigripennis*, *Martinella nigricollis* (Vietnam), *Trichomimastra tenebrosa* (Thailand), *Clavicornaltica papuana* (New Guinea) are described as new for science. 4 species are firstly recorded for Northern Vietnam.

Zusammenfassung

Lema arndti (aus Burundi), *Smaragdina pseudodivisa*, *Colaspoides serratipes*, *Mimastra nigripennis*, *Martinella nigricollis* (aus Vietnam), *Trichomimastra tenebrosa* (aus Thailand), *Clavicornaltica papuana* (aus Neuguinea) werden als neu für die Wissenschaft beschrieben und abgebildet. Vier weitere Arten werden erstmals für Nordvietnam nachgewiesen.

Key words: Chrysomelidae, new species, new localities, Burundi, Vietnam, Thailand, Northern Vietnam, New Guinea

Introduction

Thanks to amiability of my friend and colleague, Matthias Hartmann I had a good opportunity to study new materials from the Naturkundemuseum Erfurt, represented from Africa and Asia. Most part of it was collected by A. Napolov and I. Roma in Northern Vietnam. As a result of this study seven species are described as new for science and four species are firstly recorded for Northern Vietnam.

Abbreviations are used for depository places of new species:

NME – Naturkundemuseum Erfurt, Germany.

LM – author's collection, Moscow, Russia.

Taxonomical part

Lema (s. str.) *arndti* sp. nov.

Holotype (sex not determined): Burundi, Faille des Allemands, 20.II.1992 (NME).

Description. Black, elytra metallic blue with outermost interspace fulvous, this color prolonged to basal margin and disappear just before apex, apical antennal segment reddish basally.

Body narrow, elongate. Frons moderately convex, without tubercles and hairs, heart-like, with deep central groove in posterior part. Eyes deeply emarginated on inner margin. Antennae reach anterior quarter of elytra, proportions of segments are 9–5–6–7–10–9–9–10–9–10–14, preapical segments about 1.5 times as long as wide. Prothorax 1.1 times as wide near anterior margin as long, anterior angles rounded, lateral constriction deep and placed near middle, surface convex, shining, with one transverse impression near base, finely and sparsely punctate in central third. Scutellum feebly trapeziform, with truncate apex and a few large punctures. Elytra 1.8 times as long as wide, parallel-sided with rounded apices, basal convexity and postbasal impression very feeble, almost indistinct, punctures in rows deep and moderately large, not more feeble on apical slope, interspaces smooth, narrow, flat or feebly convex, but costate on apical slope. All femora not toothed, all tibiae simple. Length of body 5.2 mm.

Diagnosis. This species belongs to *L. pauperata*-group (Heinze & Pinsdorf, 1964) and have to be placed near *L. haasi* Clavareau, 1909 from Congo, but differs with larger size, entirely black antennae, head, prothorax and scutellum, more robust prothorax, not having regular rows in its middle.

Smaragdina pseudodivisa sp. nov. (Figs 1–3)

Holotype (male): Vietnam, Tam Dao, 11.V.1975, leg. L. Medvedev (LM).

Paratypes: same locality, 4.IV.1962, leg. O. Kabakov, 1 female (LM); – Vietnam, N Ninh Binh Prov., 90 km

SW Hanoi, Cuc Phuong National Park, primate rescue centre, 20°14'24"N, 105°42'53"E, 190 m, 25.IV.2012, light trap, leg. A. Weigel, 3 males (NME, 1 ex. - LM); N Vietnam, NW Dong Hoi, Rao The, Cui-Chau, 300 m, 15.IV.1963, leg. O. Kabakov, 1 female (NME); - Vietnam, mountains W Ha Tinh, Kim Kuong, 31.III-1.IV.1963, leg. O. Kabakov, 3 females (LM).

Description. Fulvous with elytra more pale, especially behind middle, in one male metasternum partly darkened. Body cylindrical, parallel-sided. Head shining and impunctate, interocular space in male 1.75 times as wide as diameter of eye, in female correspondingly 1.9 times. Antennae reach base of prothorax, proportions of segments of male are as 11-5-2-5-5-5-5-5-5-6, in female 11-6-4-8-7-6-6-6-6-8, segments 4-10 triangularly serrate, segment 4 narrower than 5 (fig. 1), segments 9-11 narrower than preceding ones. Prothorax 1.8 times as wide as long, broadest in middle, side margins rounded, turn up and transparent, surface shining and impunctate. Scutellum triangular with obtuse apex, impunctate. Elytra 1.6 times as long as wide, parallel-sided in male and very feebly arcuate in female, surface densely punctate with more feeble punctures on apical slope, interspaces with microscopical dots. Pygidium usually covered with elytra. Propleurae without pubescence. Aedeagus with apex almost truncate with long finger-like process and longitudinal elevation in apical third of underside (fig. 2), spermatheca- fig. 3. Length of male 4.5-4.9 mm, of female 4.7-5.0 mm.

Diagnosis. This species resembles widely distributed *S. divisa* Jacoby, 1889, and *S. insulana* L. Medvedev, 1992, described from island Tiam near Danang, both these species are fulvous with elytra paler than prothorax. The first of these species has antennal segments 4-10 strongly triangularly serrate, aedeagus with simple triangular apex and tarsi usually black, the other with antennae feebly serrate with subquadrangular segments; its aedeagus has the same form as in new species, but with concave underside, without central elevation.

Derivatio nominis. The name is connected with similarity to *S. divisa* Jacoby, 1889.

Colaspoides serratipes sp. nov. (Figs 4-6)

Holotype (male): N. Vietnam, Na Hang, 160 km NNW Hanoi, env. NE of Na Hang, 150-200 m, 30-31.V.1996, leg. A. Napolov & I. Roma, (NME).

Paratypes: same locality and date, 1 female (LM).

Description. Male. Metallic green, labrum and palpi fulvous, antennae black with 6 basal segments fulvous, abdomen dark fulvous including tergites, legs entirely fulvous.

Body elongate ovate. Head finely punctate and microsculptured, anterior margin of clypeus almost straight, vertex with central impressed line. Antennae thin and long, almost reach apex of elytra, segment 3 twice as long as 2, next segments subequal, preapical segments about 3.5 times as long as wide. Prothorax 1.7 times as wide as long, broadest in basal quarter, side margins rounded, surface shining, finely and sparsely punctate. Scutellum triangular with rounded apex, very finely and sparsely punctate. Elytra 1.25 times as long as wide, surface shining, with dense and moderately strong punctures and flat interspaces. Furrow of pygidium deep, narrowed to apex, with distinct ridge on bottom. Propleurae impunctate, shining. Abdomen with distinct hairy brushes on sternites 1 and 2 and with a few erect hairs on next sternites, sternites 4 and 5 serrate on sides, hind margin of 5th sternite arcuate. Underside of hind femur with numerous small teeth (looks serrate) and brush of hairs (fig. 4). Mid tibiae not curved. Segment 1 of fore and mid tarsi distinctly widened. Aedeagus with triangular acute apex, underside longitudinally concave and with unsclerotized area before apex (fig. 5). Length 4.4 mm.

Female. Prothorax dark green, elytra greenish cupreous, underside dark fulvous, legs fulvous, tarsi and hind femora not modified, spermatheca U-like (fig. 6). Length of body 4.9 mm.

Diagnosis. Belongs to species group 6 (MEDVEDEV 2003), differs from all species of this group with serrate hind femora of male; resembles a few *C. dapi* group, but differs with having brushes on two abdominal sternites of male and entirely fulvous legs in both sexes.

Derivatio nominis. The name is connected with unusual structure of femora.

Trichomimastra tenebrosa sp. nov. (Fig. 7)

Holotype (male): N. Thailand, Chiang Mai, Chiang Dao Hill Resort, 19°33'N, 99°5'E, 540 m, 10-22.VIII.2010, leg. O. Gorbunov (LM).

Paratype: Thailand, Phang-nga prov., Takuapa district, Khao Lac, 8°37'23"N, 98°15'09"E, 23.VIII.-2.

IX.2010, leg. A. Skale, 1 male without abdomen (NME).
Description. Black, vertex dark fulvous, 3 basal antennal segments fulvous, prothorax with transparent dark fulvous area in middle, legs fulvous. In paratype all head dark fulvous with black labrum.

Body narrow, elongate and practically parallel-sided. Labrum very narrow, quadrangular, a little longer than wide, clypeus narrow with arcuate anterior margin, interantennal space carinate, frontal tubercles triangular, shining and impunctate, delimited behind with straight impressed line, vertex shining, finely and very sparsely punctate, interocular space 1.5 times as wide as transverse diameter of eye. Antennae thin, as long as body, proportions of segments are as 9-3-10-12-13-12-14-14-14-15-15, preapical segments about 6-7 times as long as wide. Prothorax 1.4 times as wide as long, broadest at anterior angles, distinctly narrowed to base, with practically straight side margins, surface shining, impunctate, with feeble transverse impression. Scutellum small, elongate triangular, impunctate. Elytra twice as long as wide, surface without basal convexity, finely and densely punctate, sparsely pubescent. Aedeagus thin, slightly asymmetrical, with long finger-like apical process (fig. 7). Length of body 2.8-3.0 mm.

Diagnosis. Near *T. hirsuta* Jacoby, 1892 and *T. vietnamica* L. Medvedev, 2010, but both these species are much more light, usually with fulvous head and prothorax as well as with other form of aedeagus; cuneiform in *T. hirsuta* and almost parallel-sided with rounded apex in *T. vietnamica* (Medvedev, 2010).

Derivatio nominis. The name is connected with color of body.

***Mimastra nigripennis* sp. nov.** (Fig. 8)

Holotype (male): N. Vietnam, Na Hang, 160 km NNW Hanoi, env. NE of Na Hang, 150-200 m, 30-31.V.1996, leg. A. Napolov & I. Roma (NME).

Paratypes: same locality and date, 1 female (LM).

Description. Head, prothorax and scutellum fulvous, antennae and elytra black, metasternum black with fulvous pleurae and hind coxae, abdomen black (in one paratype underside entirely black), legs with femora entirely or mostly fulvous.

Body elongate. Head impunctate, clypeus triangular, convex, frontal tubercles triangular, delimited posteri-

orly and from each other with impressed line. Antennae longer than body in both sexes, thin, proportions of segments are as 10-4-11-14-14-14-13-13-10-10-11, preapical segments about 6-7 times as long as wide. Prothorax 1.4 times as wide as long, broadest at level of anterior angles and narrowed to base, side margins straight, anterior and posterior angles with pore, surface shining, extremely finely and sparsely punctate, with transverse impression almost interrupted in middle. Scutellum triangular. Elytra 2.3 times as long as wide in shoulders, widened to behind, shining, with rather dense and strong punctures and with short erect hairs on apical slope. Aedeagus (fig. 8) with incisures on apex, longitudinal impression on underside, in lateral view moderately curved before apex. Length of male 5.2 mm, of female 5.4 mm.

Diagnosis. Resembles *M. longicornis* Jacoby, 1892, *M. birmanica* Bryant, 1954 and *M. maai* Gressitt & Kimoto, but differs from them with entirely black elytra, without and fulvous emargination and metallic luster.

Derivatio nominis. The name is connected with color of elytra.

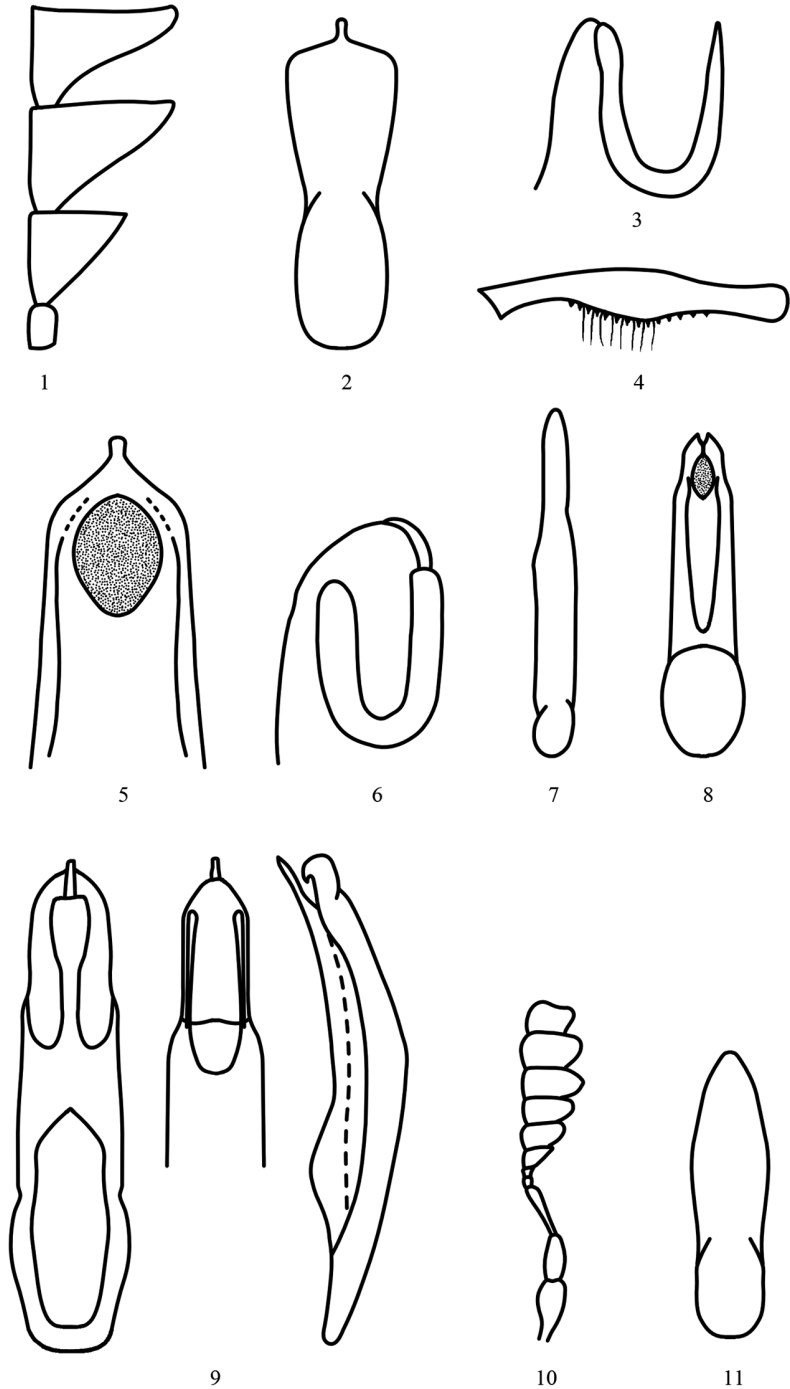
***Martinella nigricollis* sp. nov.** (Fig. 9)

Holotype (male): N. Vietnam, Na Hang, 160 km NNW Hanoi, env. NE of Na Hang, 150-200 m, 30-31.V.1996, leg. A. Napolov & I. Roma (NME).

Paratype: same locality and date, 1 male (LM).

Description. Fulvous, clypeus, frontal tubercles, sides of vertex, prothorax except middle part of basal area black, antennae with more or less darkened segments 3-11, legs entirely fulvous or tibiae and tarsi darker than femora, but not black.

Body elongate ovate, widened to behind. Head impunctate, clypeus with longitudinal ridge, frontal tubercles convex, triangular, with anterior angles produced into interantennal space, delimited posteriorly with sharp transverse groove. Antennae almost as long as body, proportions of segments are as 11-3-5-10-10-10-10-10-10-9-10, preapical segments about 7 times as long as wide. Prothorax 1.5 times as wide as long, broadest in middle, with side margins arcuate, surface shining, practically impunctate. Scutellum triangular with rounded apex. Elytra 1.65 times as long as wide, shining, very finely and rather densely punctate and with



Figs 1-3. *Smaragdina pseudodivisa*: 1 - antennal segments 3-6, 2 - aedeagus ventral, 3 - spermatheca, **Figs 4-6.** *Colaspoides serratipes*: 4 - hind femur of male, 5 - aedeagus ventral, 6 - spermatheca, **Fig. 7.** *Trichomimastra tenebrosa*, aedeagus ventral, **Fig. 8.** *Mimastra nigripennis*, aedeagus ventral, **Fig. 9.** *Martinella nigricollis*, aedeagus ventral, dorsal and lateral, **Figs 10-11.** *Clavicornaltica papuana*: 10 - antennal club, 11 - aedeagus ventral

short erect hairs on apical slope. Pygidium truncate at apex. Aedeagus very complicate (fig. 9), as usual in this genus. Length of body 5.2–5.9 mm.

Diagnosis. This genus includes 4 species with entirely fulvous body or with black tibiae and tarsi (MEDVEDEV 2000). A new species differs well with color of head and prothorax and other form of aedeagus.

Derivatio nominis. The name is connected with color of prothorax.

Clavicornaltica papuana sp. nov. (Figs 10–11)

Holotype (male): Indonesia, W-Papua, vic. Kaimana, road 18 km NE, N 53°31'11", E 133°40'15", 50–80 m, 21.II.2011, leg. A. Weigel (NME).

Paratypes: same locality and date, 5 ex. (NME, 2 ex. – LM).

Description. Red to dark red, antennae and legs lighter, underside black with apex of abdomen red.

Body ovate, 1.5 times as long as wide. Head with straight frontal groove, impunctate, with very thin microsculpture, frons sharply divided from clypeus, which is convex, with straight anterior margin, its hind part divides antennal insertion, rather broad, almost twice as wide as antennal insertion. Labrum with incised anterior margin. Eyes large and convex, ovate (0.125–0.15 mm). Frontal tubercles absent. Antennal club broad, with the first two segments very small, the next segment triangular, the next three strongly transverse and apical segment narrower, truncate and slightly excavated (fig. 10). Prothorax 2.4 times as wide as long, broadest near acute hind angles, side margins arcuate, surface shining, with very sparse and extremely fine punctures and a row of more distinct punctures along basal margin. Scutellum triangular, smooth. Elytra 1.15 times as long as wide, with 11 distinct rows of punctures and flat shining interspaces, humeral tubercle absent, but wings present in both sexes. Metasternum feebly convex, without central elevation, rather strongly convex. First abdominal sternite with sharp and high ridge, widened anteriorly. Aedeagus – fig. 11. Length of male 1.3–1.4 mm, of female 1.6–1.9 mm.

Diagnosis. Only 2 species are still known from New Guinea (MEDVEDEV 1996): *C. iriana* L. Medvedev, 1966 and *C. tarsalis* L. Medvedev, 1996. New species differs well from both of them with color, entirely

developed 11 elytral rows of punctures, other form of antennal club and abdominal ridge.

Derivatio nominis. The name is connected with distribution of the species.

Species new for North Vietnam

Basilepta ruficollis Jacoby, 1885

Material examined. N. Vietnam, Na Hang, 160 km NNW Hanoi, env. NE of Na Hang, 150–200 m, 30–31.V.1996, leg. A. Napolov & I. Roma, 1 ex. (NME).

Remark. *Basilepta latipennis* (Pic, 1928) described from North Vietnam (Shapa) is a new synonym of *B. ruficollis* Jacoby, 1885, described from China. Pic's type was studied.

Cassena indica Jacoby, 1889

Material examined. N. Vietnam, Na Hang, 160 km NNW Hanoi, env. NE of Na Hang, 150–200 m, 30–31.V.1996, leg. A. Napolov & I. Roma, 1 female (NME).

Remark. This species was known from Myanmar, Thailand and South Vietnam (Pleiku), (KIMOTO 1889), but firstly found in North Vietnam.

Longitarsus azumai Kimoto, 2000

Material examined. Vietnam, N Ninh Binh Prov., 90 km SW Hanoi, Cuc Phuong National Park, primate rescue centre, 20°14'24"N, 105°42'53"E, 190 m, 25.IV.2012, light trop, leg. A. Weigel, 1 female (NME).

Remark. Species was described from Thailand and firstly found in Vietnam. Determination needs confirmation because based on single female.

Trachyaphthona (Zipangia) aethiops L. Medvedev, 2004

Material examined. N. Vietnam, Na Hang, 160 km NNW Hanoi, env. NE of Na Hang, 150–200 m, 30–31.V.1996, leg. A. Napolov & I. Roma, 1 ex. (NME).

Remark. Firstly found in North Vietnam, was known from Laos and South Vietnam (Buon Loi).

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KINZELBACH, R. K. (2013): Das neue Buch vom Pfeilstorch. – Rangsdorf, Basiliken-Press, 100 Seiten, 15,5 x 19,5 cm, broschiert, 51 zumeist farbige Abb. ISBN 978–3–941365–06–3, Preis 16,90 €.

Wie schon der Titel verrät, gibt es auch einen Vorgänger: „Das Buch vom Pfeilstorch“, vom gleichen Autor aus dem Jahre 2005. Das erste, nur als Informationsbroschüre für die Besucher der Zoologischen Sammlung der Universität Rostock gedacht, erwies sich als Kassenschlager und war im Nu vergriffen. Die Gründe dafür werden rasch ersichtlich, wenn man das Büchlein in der Hand hat. Ragnar Kinzelbach, der seit Jahrzehnten durch bahnbrechende Arbeiten zur historischen Zoologie und Kulturzoologie bekannt ist, hat alle Register gezogen und um den Rostocker Pfeilstorch eine Fülle interessanter Details platziert, die im neuen Buch noch um einige Nuancen erweitert wurden. Zwar geht es zunächst um die Geschichte des weltweit ältesten Pfeilstorches in der Zoologischen Sammlung der Universität Rostock, dem Wirkungsfeld des Autors vor seiner Emeritierung, doch wird diese auch zum Anlaß genommen einen Ausflug in die Geschichte der Theorien der Vogelzugforschung zu unternehmen. Dies reicht von ehemals kuriosen Vorstellungen über den Verbleib der Vögel im Winter bis zu mehr und mehr realistischeren Ansichten über Winteraufenthalt und Zugwege. Dabei halfen auch verschiedene Markierungsmethoden, für deren Anwendung es durchaus auch andere Gründe gab als nur der Erkenntnisgewinn bei der Vogelzugforschung, wie wir aus dem Büchlein erfahren. Detailliert sind Briefverkehr und Pressemeldungen über die Erlegung und die Etappen des Verbleibs des Rostocker Pfeilstorches und seiner bildlichen Darstellungen dargelegt. Sie vermitteln neben den Fakten zum

Storch auch einen Eindruck von kulturhistorischen und gesellschaftspolitischen Gegebenheiten jener Zeit. Wie so oft in naturwissenschaftlichen Sammlungen, gehen manche Stücke, oder Informationen über deren Verbleib, in den Wirren der Zeit unter. Nachdem von Rudolf Kuhk, Autor der „Vögel Mecklenburgs“ und zeitweiliger Leiter der Vogelwarte Radolfzell, 1930 der Rostocker Pfeilstorch wiederentdeckt und in zahlreichen Publikationen vorgestellt wurde, geriet er erneut in Vergessenheit. Kinzelbach traf 1995 zufällig auf das ihm aus der Literatur bestens vertraute Stück, übernahm die Verantwortung für Erhalt und Dokumentation dieses einzigartigen Dokuments, machte es zum Symbol der Wiedergeburt der organismischen Zoologie und zum Logo der Zoologischen Sammlung der Universität Rostock. Ein Teil dieser Bemühungen ist dieses Buch. So wird darin auch über den weiteren Umgang mit dem Präparat in Rostock berichtet, mit einem Seitenblick auf seine Rezeption in Dichtung, Folklore, Kunst und Design sowie Esoterik. Neben dem Rostocker Pfeilstorch sind weitere bekannt geworden. 35 andere Pfeilstörche werden chronologisch und detailliert aufgeführt und auch auf Irreführungen hingewiesen. Der Frage nach der Herkunft der Pfeile und den Gefahren auf der Wanderung ist ein weiteres Kapitel gewidmet. Es folgen Kurzbiografien von 13 Personen, die mit dem Rostocker Pfeilstorch besonders verbunden sind. Schließlich wird das Heim des Pfeilstorches, die Allgemeine und Spezielle Zoologie und die Zoologische Sammlung der Universität Rostock vorgestellt. Alles in allem ein außerordentlich interessantes, facettenreiches und kurzweiliges Büchlein, das Ornithologen, vogelkundlichen Laien sowie an Wissenschafts- und Kulturgeschichte Interessierten wärmstens empfohlen werden kann.

Herbert Grimm

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