

KEY TO GENERA

TRIBE CASSIDINI

1. New World genera.
..... 2.
- Old World genera.
..... 48.
2. At least mid and hind tarsal claws distinctly pectinate.
..... 3.
- Tarsal claws simple, appendiculate, or micropectinate.
..... 8.
3. All claws pectinate.
..... 4.
- Fore claws with basal tooth, mid and hind claws pectinate.
..... 6.
4. Pecten on claws large, extending at least to half length of claw. Clypeus broad, distinctly wider than long, clypeal lines incomplete or absent. Antennal segment 3 as long as or slightly longer than segment 2.
..... 5.
- Pecten on claws very short, only slightly extending behind margin of claw. Clypeus narrow, approximately as wide as long, clypeal lines complete, converging in triangle with apical angle placed distinctly before apex of clypeus. Antennal segment 3 distinctly shorter than segment 2. Brazil and Paraguay.
..... **Ctenocharidotis**
5. Antennae with six distal, dull and black segments. Segment 6 distinctly wider, much dull and hairy than segment 5. Body usually elongate, almost or distinctly parallelsided, elytral disc depressed. Brazil, Paraguay, and Uruguay.
..... **Ctenocassida**
- Antennae with five distal segments. Segment 6 distinctly narrower, much smooth and glabrous than segment 7, sometimes intermediate between segments 5 and 7 but never as dull and hairy as five distal segments. Body usually oval or circular, only occasionally parallelsided, elytral disc usually regularly convex, occasionally depressed. From Colombia to N Argentina.
..... **Cteisella**
6. Clypeal lines distinct, well visible at least in their basal 2/3 length, anterior margin of clypeal plate elevated. Elytra unicolours yellow or with regular longitudinal stripes.
..... 7.
- Clypeal lines absent or fine, well visible at least to their basal half length, anterior margin of clypeus usually not elevated. Elytra usually with pattern, only occasionally uniformly yellow, never longitudinally striped. From S USA to N Argentina.
..... **Microctenochira**

7. Antennal segment 3 shorter than segment 2. Clypeal lines well visible only in their basal 2/3 length. Elytra longitudinally stripped. Paraguay.	
.....	Pseudoctenochira
- Antennal segment 3 approximately 1.5 times as long as segment 2. Clypeal lines very deep, well visible on whole length. Elytra uniformly yellow. Brazil	
.....	Ctenophilaspis
8. Claws appendiculate or apparently appendiculate (simple but appearing appendiculate due to distally projecting flanks of last tarsal segment).	
.....	9.
- Claws simple or micropectinate.	
.....	27.
9. Claws never appear bifid.	
.....	10.
- Basal tooth of claws elongate, spiniform, claws appear bifid. Brazil.	
.....	Drepanocassis
10. Venter of pronotum with distinct antennal grooves.	
.....	11.
- Venter of pronotum without antennal grooves.	
.....	12.
11. Antennal grooves deep, bordered externally by a sharp carina. Antennae slim, segments 9 and 10 longer than wide. Clypeus flat, not or only slightly wider than long. Prosternal process strongly expanded apically. From Canada to N Argentina.	
.....	Deloyala
- Antennal grooves shallow, bordered externally by an obtuse margin. Antennae stout, segments 9 and 10 distinctly wider than long. Clypeus elevated, twice wider than long. Prosternal process slightly expanded apically. Panama and Colombia.	
.....	Chersinellina
12. Except fore claws, at least one of hind claws appendiculate.	
.....	13.
- Only fore claws appendiculate, mid and hind claws simple. Central America.	
.....	Tapinaspis
13. Clypeus flat, or impressed, or only slightly elevated.	
.....	14.
- Clypeal plate between clypeal lines distinctly elevated, forms a triangle often with a pit or sulcus in the middle. Small, stout, with narrow, deflexed explanate margin of elytra. Prosternal process broad, parallelsided, not expanded apically. From S USA to Argentina.	
.....	Agroiconota
14. Prosternal process broad, not or only slightly expanded apically.	
.....	15.
- Prosternal process narrow to broad but always distinctly expanded apically.	
.....	20.

15. Clypeal lines distinct at least in basal half.
..... 16.
- Clypeal lines obsolete or fine, distinct at most in basal 1/3 length.
..... 19.
16. Clypeal lines complete, converging in triangle or trapezium.
..... 17.
- Clypeal lines incomplete, distinct only in their basal half length.
..... 18.
17. Clypeal lines converging in trapezium with indistinct anterior margin. External claw of mid tarsi in male without basal tooth. Dorsum opaque. Elytral disc strongly convex, explanate margin deflexed. USA and S Canada.
..... **Strongylocassis**
- Clypeal lines converging in triangle. External claw of mid tarsi in male with basal tooth. Dorsum shiny. Elytral disc moderately convex, explanate margin moderately deflexed to subhorizontal. From S USA to Argentina.
..... **Metrionella**
18. All claws with basal tooth. South America.
..... **Bradycassis**
- Mid and hind internal claws without basal tooth. Mexico.
..... **Mexicaspis**
19. Elytral explanate margin at apices projecting caudad in a shelf-like fashion, horizontal. Dorsum alutaceous. Antennae stout, segments 9 and 10 not longer than wide. Only one species in North America north of Mexico.
..... **Erepsocassis**
- Elytral explanate margin at apices more or less deflexed not projecting caudad in a shelf-like fashion. Dorsum shining. Antennae slim, segments 9 and 10 usually longer than wide. Numerous species in whole New World.
..... **Charidotella**
20. Explanate margin of elytra narrow, not wider than 1/3 width of disc of each elytron. Body oval to elongate-oval, usually parallelsided.
..... 21.
- Explanate margin of elytra broad, always wider than 1/3 width of disc of each elytron. Body usually broad, circular, short-oval or subtriangular, only occasionally parallelsided.
..... 22.
21. Clypeus apically with a deep impression, thus anterior margin of clypeus forms a fold. Explanate margin of elytra deflexed, never form a shallow gutter. Dorsum with dark pattern, venter partly to completely black. Brazil, Argentina, and Uruguay.
..... **Saulaspis**
- Clypeus apically without or with indistinct impression, anterior margin of clypeus never form a fold. Explanate margin of elytra feebly deflexed to subhorizontal, often tends to form a shallow gutter. Dorsum and venter uniformly yellow or green. From S USA to Argentina.
..... **Gratiana**

22. Fifth and sixth antennal segments shiny and sparsely pubescent, belong to basal segments.

..... 23.

- Sixth antennal segment dull and densely pubescent, belongs to distal segments. Fifth segment intermediate, more densely pubescent and less shiny than segments 1-4 but slightly less glabrous than segment 6. Elytra with conical tubercle. Brazil.

..... **Tetracassis**

23. Claws with distinct basal tooth. Clypeus usually without distinct round or oval impression.

..... 24.

- Claws simple, but appearing appendiculate due to distally projecting flanks last segment of tarsi. Clypeus apically with deep round or oval impression. Elytra always uniformly convex. Humeral angles distinctly angulate. From Panama to Argentina.

..... **Parachirida**

24. Clypeus impunctate, usually shiny and glabrous, without impressed line. Elytral punctation usually regular, fine, only occasionally completely irregular. Pronotal disc never wrinkled.

..... 25.

- Clypeus coarsely punctate, with impressed median line. Elytral punctation completely irregular. Pronotal disc wrinkled. Elytral disc with triangular tubercle. Ventrites mostly black. From Guyana to Argentina.

..... **Metriona**

25. Explanate part of prosternal process lies at the same level or only slightly below the central part of the process. Head cavity at sides without sharp carina or with low carina as continuation of prosternal collar. Basal margin of pronotum on sides never emarginate.

..... 26.

- Explanate part of prosternal process lies distinctly below the central part of the process. Head cavity at sides with high sharp carina distinctly separated from prosternal collar. Basal margin of pronotum on sides shallowly emarginate. Body subtriangular or pentagonal, elytral disc with conical tubercle. Punctation of elytra extremely fine. S Brazil, Bolivia, Paraguay, and N Argentina.

..... **Syngambria**

26. Head with frontoclypeal sulci. Elytra more or less parallelsided. Elytral disc coarsely punctate, in posterior half with more or less developed folds, tubercles or at least elevated some intervals. From USA to S Brazil.

..... **Helocassis**

- Head without frontoclypeal sulci. Elytra from circular to triangular, only occasionally slightly parallelsided. Elytral disc usually finely punctate, if punctation coarse then disc in posterior half without folds, tubercles or elevated intervals. Whole Central and South America.

..... **Plagiometriona**

27. Both tarsal claws well developed.
 28.
 - Tarsal claws single. Brazil.
 **Eremionycha**
28. Clypeal lines absent, or fine, each side of clypeal triangle without a groove.
 29.
 - Clypeal lines extremely deep and broad, on each side of clypeal triangle there is a deep groove. Pronotum without basal corners. Third antennal segment shorter than second. Prosternal process only slightly expanded apically. Base of elytra only slightly wider than pronotum. Elytral disc regularly convex, vittate. Argentina and Uruguay.
 **Chacocassis**
29. Venter of pronotum without antennal grooves.
 30.
 - Venter of pronotum with deep antennal grooves bordered externally by a sharp carina. Elytral disc with tubercles. From S USA to Costa Rica.
 **Parorectis**
30. Clypeus not elevated, often narrow, as wide as long or longer than wide. Frontoclypeal sulcus often present. Small, length usually below 8 mm.
 31.
 - Clypeus more or less elevated, especially before antennal insertions, wider than long. Frontoclypeal sulcus absent. Mostly large, length often above 8 mm.
 38.
31. Pronotal sides sharply angulate or pronotum with basal corners.
 32.
 - Pronotal sides more or less angulate, pronotum never with basal corners.
 33.
32. Pronotum with basal corners, disc and marginalia coarsely punctate. Anterior margin of elytral disc crenulate. Puncturation of elytra coarse, mostly irregular. Third antennal segment distinctly longer than second. Body not regularly circular. North America (one native and few introduced species).
 **Cassida**
- Pronotal sides distinctly angulate. Anterior margin of elytral disc not crenulate. Puncturation of elytra regular. Third antennal segment not longer than second. Body regularly circular. From Mexico to Ecuador and Guyana.
 **Cyclocassis**
33. Third antennal segment longer than second. Claws usually indistinctly micropectinate.
 34.
 - Third antennal segment shorter than second. Claws usually distinctly micropectinate. Body usually circular, occasionally oval. Elytral disc usually regularly convex. Base of elytra usually not or only slightly wider than pronotum. Rich in species and very heterogeneous. Whole Central and South America.
 **Charidotis**

34. Antennae with six basal glabrous segments, moderately filiform, segments 9 and 10 at most 1.5 times as long as wide. Base of elytra not or only slightly wider than pronotum.
..... 35.
- Antennae with only three basal glabrous segments, extremely filiform, segments 9 and 10 at least twice as long as wide. Base of elytra distinctly wider than pronotum, humeri sharp. Elytral disc in posterior half with yellow transverse band on black ground. Whole Central and South America.
..... **Ischnocodia**
35. Clypeus broad, distinctly wider than long. Frontoclypeal sulci present.
..... 36.
- Clypeus narrow, as long as or longer than wide. Frontoclypeal sulci absent. Anterior margin of elytron forms an angle, humeri distinctly protruding anterad. Pronotal and elytral marginalia with brown spots. Brazil.
..... **Leptocodia**
36. Prosternal process between coxae very broad, only slightly expanded apically. Mid claws in both sexes symmetrical.
..... 37.
- Prosternal process between coxae moderately broad, distinctly expanded apically. Mid claws in male strongly asymmetrical. From S USA to Costa Rica.
..... **Jonthonota**
37. Frontoclypeal sulcus broad and deep. Elytral marginalia impunctate, at apices projecting caudad in a shelf-like fashion, horizontal. S USA.
..... **Opacinota**
- Frontoclypeal sulcus fine and shallow. Elytral marginalia punctate, at apices deflexed, not projecting caudad in a shelf-like fashion. S USA and Cuba.
..... **Floridocassis**
38. Prosternal process between coxa flat, or impressed, or regularly convex, without longitudinal carina.
..... 39.
- Prosternal process between coxa with longitudinal, obtuse carina. Third antennal segment not longer than second. Elytra angulate in profile, coarsely irregularly punctate. Pronotum with distinct basal corners. Sides of explanate part of prosternal process deeply impressed. S Brazil.
..... **Exestastica**
39. Clypeus usually very short, often triangular, without deep impression in the middle. Large, size usually above 6 mm, if smaller then elytra never yellow and black maculate.
..... 40.
- Clypeus only slightly wider than long, with deep impression in the middle. Small, size always below 5.5 mm. Elytra yellow and black maculate. Elytral disc regularly convex, puncturation fine, partly regular. Marginalia strongly deflexed, impunctate.

Third antennal segment longer than second. S Brazil, Bolivia, N Argentina, and Uruguay.

..... **Aporocassida**

41. Elytra with distinct marginal row between disc and marginalia, if the row indistinct then elytra extremely coarse and dense punctate.

..... 42.

- Elytra extremely fine and irregularly punctate with no marginal row between disc and marginalia. Body almost hemispherical. Pronotum widest before the middle, without basal corners. Clypeus very short, triangular, with strongly elevated sides. Prosternal process between coxa narrow, regularly convex, strongly expanded apically. Antennae with six basal glabrous segments, segment 3 longer than 2. Ecuador and Brazil.

..... **Rhoia**

42. Pronotum not sexually dimorphic, its basal margin not emarginate on sides, pronotal sides regularly rounded or angulate but without distinct basal corners or lobes protruding posterad.

..... 43.

- Pronotum strongly sexually dimorphic, its basal margin emarginate on sides, thus basal corner distinct, or posterolateral parts of marginalia forms a lobe protruding posterad. Pronotum widest before base, anterior margin often shallowly emarginate. Clypeus very short, triangular, with strongly elevated sides. Prosternal process between coxa narrow, longitudinally impressed. Antennae with six basal glabrous segments, segment 3 slightly longer than 2. Both elytral disc and marginalia punctate, puncturation of disc coarse, mostly irregular. Whole Central and South America.

..... **Hybosa**

43. Antennae with only three basal glabrous segments.

..... 44.

- Antennae with four, five or six basal glabrous segments.

..... 45.

44. Body triangular. Explanate margin of elytra extremely broad, almost as wide as each disc of elytron. Antennal segment 3 twice longer than segment 2. Colombia and Ecuador.

..... **Aidoia**

- Body more or less circular. Explanate margin of elytra moderately broad, not wider than half width of each disc of elytron. Antennal segment 3 not or only slightly longer than segment 2. From Nicaragua to C Brazil.

..... **Nuzonia**

45. Antennae with four or five basal glabrous segments.

..... 46.

- Antennae with six basal glabrous segments, sixth segment sometimes slightly more dense pubescent than segment five, but never as dense as segment 7.

..... 47.

46. Antennae with four basal glabrous segments. Pronotum very broad, twice or more wider than long, widest in the middle, sides angulate. Body usually very broad and in most species depressed, occasionally angulate in profile but never gibbous or tuberculate. Puncturation of elytra more or less regular. Puncturation of marginalia, if present, never coarser than puncturation of disc. Tarsi slim, last segment distinctly extending behind marginal setae of third segment. Large, length always above 8.5 mm, usually above 10 mm. From Nicaragua to S Brazil.

..... **Orexita**

- Antennae with five basal glabrous segments. Pronotum moderately broad, less than 1.6 times as wide as long, sides narrowly rounded. Body short oval, gibbous or tuberculate. Puncturation of elytra mostly irregular. Puncturation of marginalia coarser than puncturation of disc. Tarsi stout, last segment never extending behind marginal setae of third segment. Small, length always below 8.5 mm. Brazil and Paraguay.

..... **Crambelea**

47. Clypeus very short, triangular or with anterior margin in arch, strongly convex. Anterior margin of pronotum straight or shallowly emarginate, sides broadly rounded. Third antennal segment not longer than second. Metasternal plates strongly elevated. From French Guyana to Bolivia and S Brazil.

..... **Scaeocassis**

- Clypeus not extremely short, trapezoidal or square, slightly to moderately convex. Anterior margin of pronotum usually more or less convex, occasionally straight, sides from rounded angulate. Third antennal segment usually longer than second. Metasternal plates slightly to moderately elevated. Rich in species and heterogeneous. Whole Central and South America.

..... **Coptocycla**

48. Tarsi modified, last segment elongate, twice or more longer than third segment, distinctly extending behind marginal setae of the third segment.

..... 49.

- Tarsi not modified, last segment not or only slightly extending behind marginal setae of the third segment.

..... 51.

49. Elytra without tubercles, costae and folds, at most with low longitudinal elevations, pronotal disc without tubercles. Antennal grooves absent or shallow with no external carina.

..... 50.

- Elytra with tubercles, costae and folds, pronotal disc with a pair of tubercles. Antennal grooves deep, bordered externally by a sharp carina. Third antennal segment longer than second. Pronotum without basal corners, sides broadly rounded. Turkey, the Near East and Middle Asia.

..... **Macromonycha**

50. Puncturation of elytra mostly irregular. Pronotum subpentagonal, without basal corners, explanate margin rugose. Third antennal segment shorter than second. Base

of elytra much wider than pronotum, elytral sides strongly converging posterad. Small, length below 4.5 mm. Arabian Peninsula.

..... **Nabathaea**

- Puncturation of elytra partly regular. Pronotum semicircular, with basal corners, explanate margin punctate, without rugosities. Third antennal segment longer than second. Base of elytra slightly wider than pronotum, elytral sides moderately converging posterad. Large, length above 5.5 mm. Armenia and Middle Asia.

..... **Chiridula**

51. Mid femora unmodified, on ventral margin without apical tubercle.

..... 52.

- Mid femora on ventral margin, close to apex, with tubercle; usually the tubercle is large, dentiform, sometimes is very small only in shape of slightly elevated ventral margin of femur. Body circular, elytra with conical tubercle. Puncturation of elytra very coarse, marginalia impunctate, very broad, horizontal. Clypeus flat. Venter of pronotum without antennal grooves. Antennae slim, filiform, third segment distinctly longer than second. Claws simple but appearing strongly toothed due to distally projecting flanks of last segment of tarsi. Only New Guinea and N Australia.

..... **Meroscalsis**

52. Labrum with median longitudinal carina.

..... 53.

- Labrum without longitudinal carina.

..... 54.

53. Labrum stout, rhomboidal. Claws simple but appearing toothed due to distally projecting flanks of the claw segment. Antennal segments 9-10 at most twice longer than wide. SE Asia and Philippines.

..... **Malayocassis**

- Labrum transverse. Claws simple, claw segment without projecting flanks. Antennae extremely filiform, segments 9-10 more than twice as long as wide. From Malay Peninsula to Australia.

..... **Thlaspidula**

54. Venter of pronotum without, or at most along head with antennal grooves.

..... 55.

- Venter of pronotum with deep and long antennal groove extending from each side of head to explanate lateral part; the channel can accommodate whole antenna. Body oval, regularly convex. Puncturation of elytra coarse, more or less regular. Pronotum angulate on sides. Base of elytra not or only slightly wider than pronotum, explanate margin narrow, deflexed. Subsaharian part of Africa, Iran, Pakistan, and India.

..... **Oocassida**

55. Antennae with at least four basal glabrous segments.

..... 56.

- Antennae with only three basal glabrous segments. Body circular, elytra with conical tubercle or distinct postscutellar elevation. Marginalia punctate, very broad, subho-

rizontal. Clypeus flat with fine clypeal lines converging in triangle. Venter of pronotum without antennal grooves. Antennae extremely slim, filiform, third segment distinctly longer than second. Claws simple. Madagascar.

..... **Hovacassis**

56. Clypeus at most twice as wide as long.

..... 57.

- Clypeus very short, at least thrice as wide as long, elevated. Dorsum with white adherent vestiture. Pronotum reversely trapezoidal, widest before the middle. Elytral disc coarsely irregularly punctate, marginalia punctate. Humeral angles strongly protruding anterad. Antennae stout, distal segment strongly microsculptured or striated. Maternal plates strongly elevated. Claws simple. Large, length above 8 mm. South Africa.

..... **Basipta**

57. Prosternal alae without deep pit. Labrum in the middle of anterior margin without spines.

..... 58.

- Prosternal alae with deep pit. Labrum on each side of median emargination with small spine. Whole pronotum, elytra, and clypeus coarsely punctate. Venter of pronotum with deep antennal grooves. Claws with large basal tooth. Large, length above 9 mm. Zambesi region in South Africa.

..... **Psalidoma**

58. Base of pronotum in front of humerus without emargination.

..... 59.

- Base of pronotum in front of humerus with emargination. Pronotum with rounded to subangulate sides, widest in or before middle. Both pronotum and elytra coarsely irregularly punctate, marginal row between elytral disc and marginalia often indistinct or obsolete. Clypeus broad with fine clypeal lines. Prosternal collar often with lateral emargination, obsolete in small species. Claws simple. Madagascar.

..... **Sphenocassis**

59. Prosternal collar on sides with lateral emargination, above the emargination often occurs a small plate.

..... 60.

- Prosternal collar on sides without emargination.

..... 71.

60. Body strongly convex, spherical or cylindrical, explanate margin steeply deflexed.

..... 61.

- Body moderately convex, or angulate in profile, or depressed, explanate margin moderately deflexed.

..... 63.

61. Pronotum and elytra bare.

..... 62.

- Pronotum and elytra pubescent and with erect setae. Body cylindrical (nominotypical subgenus) or broadly oval (sgen. **Luimbelia**, see antithesis 63). Pronotal sides

more or less angulate, disc punctate. Puncturation of elytra coarse, more or less regular, sometimes disturbed by elytral impressions. Clypeus broad, punctate, with deep lateral grooves. Venter of pronotum with antennal grooves, bordered externally by an obtuse carina. Third antennal segment slightly longer than second. Claws simple. Africa except Madagascar.

..... **Smeringaspis s. str.**

62. Claws with large basal tooth. Explanate margin completely perpendicular to the abdomen surface. Pronotum trapezoidal, widest before middle. Elytral disc and marginalia irregularly punctate, marginal interval visible only in anterior half of disc. Clypeus broad, shiny, with fine lateral grooves and only few small punctures. Venter of pronotum with short antennal grooves, bordered externally by an obtuse carina. Third antennal segment distinctly shorter than second. NE Africa.

..... **Chelysida**

- Claws simple. Explanate margin completely perpendicular to the abdomen surface. Pronotum trapezoidal, widest before middle. Elytral disc more or less regularly, marginalia irregularly punctate, marginal interval distinct. Clypeus broad, opaque, with shallow lateral grooves and only few small punctures. Venter of pronotum in some species with a plate opposite to the plate above lateral emargination of the prosternal collar. Third antennal segment not or only slightly longer than second. Africa south of N Congo.

..... **Ischiocassis**

63. Dorsum bare or at most with erect setae.

..... 64.

- Dorsum pubescent and with erect setae (see antithesis 61).

..... **Smeringaspis sgen. Luimbelia**

64. Pronotal sides rounded, or more or less angulate but without basal corners, widest before base.

..... 65.

- Pronotum more or less semicircular, widest at base, basal corners distinct.

..... 70.

65. Last segment of tarsi normal, not extending behind anterior margin of third segment.

..... 66.

- Last segment of tarsi elongate, distinctly extending behind anterior margin of third segment. Body slightly cuneiform, elytral disc regularly convex with longitudinal elevations. Base of elytra much wider than pronotum, humeral angles angulate. Disc of pronotum sparsely punctate, marginalia rugose. Puncturation of elytra mostly irregular. Explanate margin of elytra very narrow, close to apex linear. Clypeus broad, punctate, with very fine lateral lines. Venter of pronotum with short antennal grooves, bordered externally by an obtuse carina. Third antennal segment as long as second. Claws large, simple. Arabian Peninsula.

..... **Seminabathea**

66. Antennae stout, segment 10 not longer than wide.

67.

- Antennae slim, segment 10 longer than wide. Body strongly triangular, base of elytra much wider than pronotum. Pronotum very broad, approximately twice as wide as long, its whole surface punctate. Elytral disc and marginalia densely irregularly punctate, marginal row visible only in anterior part of disc. Marginalia in anterior half broad, strongly narrowed posterad. Clypeus broad, with fine lateral lines. Venter of pronotum with short antennal grooves, bordered externally by obtuse or sharp carina. Third antennal segment shorter than second. Claws simple. West and Central Africa.

..... **Trigonocassis**

67. Elytra bare.

68.

- Elytra with erect setae. Iran.

..... **Rhytidocassis** (part.)

68. Pronotum regularly elliptical, sides broadly rounded. Elytral puncturation never black.

69.

- Pronotum less regularly elliptical, sides narrowly rounded. Elytral puncturation black. West Africa.

..... **Acrocassis** sgen. **Bassamia**

69. Elytra with three distinct longitudinal elevations. Body oval, more or less parallelsided. Base of elytra only slightly wider than pronotum, humeral angles rounded. Disc of pronotum and marginalia punctate. Puncturation of elytra mostly irregular. Explanate margin of elytra narrow, not wider than 1/6 width of disc. Clypeus broad, punctate, with distinct lateral lines. Venter of pronotum with short antennal grooves, bordered externally by a sharp carina. Third antennal segment shorter than second. Claws simple or with small tooth placed in the middle of ventral margin of claw. Dorsum brown. W Palaearctic.

..... **Hypocassida**

- Elytra without or at most with single, very low longitudinal elevation. Body usually more or less triangular, sides of elytra distinctly converging posterad, occasionally body slightly cylindrical. Base of elytra usually much wider than pronotum, humeral angles more or less angulate. Disc of pronotum and marginalia punctate. Puncturation of elytra completely irregular. Clypeus broad, punctate, with very fine lateral lines. Venter of pronotum with short antennal grooves, bordered externally by sharp or obtuse carina. Third antennal segment shorter to as long as second. Claws simple or with small tooth placed close to base of claw. Dorsum yellow or green, occasionally area close to scutellum with red to brown patch. Africa, Iran, and Indian Subcontinent.

..... **Rhytidocassis**

70. Body parallelsided, elytra regularly convex. Base of elytra only slightly wider than pronotum, humeral angles subangulate. Disc of pronotum finely punctate. Puncturation of elytra completely irregular, disc with longitudinal elevations. Clypeus bro-

ad, impunctate, with very fine lateral lines only in basal half. Venter of pronotum with short antennal grooves, bordered externally by an obtuse carina. Third antennal segment as long as or slightly longer than second. Claws simple. East Africa.

..... **Erbolaspis**

- Body more or less converging posterad, elytra more or less angulate in profile, sometimes with triangular tubercle. Base of elytra usually wider than pronotum, humeral angles more or less angulate. Disc of pronotum punctate. Puncturation of elytra completely irregular. Clypeus broad, not or finely punctate, with fine lateral lines. Venter of pronotum with short antennal grooves, bordered externally by sharp or obtuse carina. Third antennal segment as long as to slightly longer than second. Claws simple or with small tooth placed close to base of claw. Whole Africa except Madagascar.

..... **Acrocassis**

71. Tarsal claws with basal tooth, or simple but appearing toothed due to distally projecting flanks of the claw segment.

..... 72.

- Tarsal claws simple.

..... 79.

72. Venter of pronotum with deep antennal groove.

..... 73.

- Venter of pronotum without antennal groove.

..... 76.

73. Pronotum semicircular, widest at base, with distinct basal corners. Base of elytra slightly to moderately wider than pronotum.

..... 74.

- Pronotum with rounded sides, widest in the middle, no basal corners. Base of elytra usually much wider than pronotum.

..... 75.

74. Prosternal collar elongate, with sides angulate. Antennal groove bordered externally by a sharp carina. Marginalia of pronotum and elytra impunctate. S China, NE India, and Indochina.

..... **Glyphocassis s. str.**

- Prosternal collar short, its sides not angulate. Antennal groove bordered externally by an obtuse carina. Marginalia of pronotum and elytra punctate. W Palaeartic.

..... **Pilemostoma**

75. Claws simple but appearing toothed due to distally projecting flanks of last segment of tarsi. Explanate margin of elytra extremely broad, in the widest part only slightly narrower than half width of disc. Antennae strongly dimorphic, in male antennae extremely slim, filiform, with segments 9 and 10 many times longer than wide. Elytral disc with conical tubercle. Ceylon, Indochina, Malay Peninsula, Borneo and Sumatra.

..... **Rhacocassis**

- Claws with basal tooth. Explanate margin of elytra moderately broad, in the widest part three times narrower than half width of disc. Antennae not or indistinctly dimorphic, in male segments 9 and 10 at most twice longer than wide. Elytral disc regularly convex or only slightly gibbous. Whole Africa, including Madagascar, and Oriental Region.

..... **Chiridopsis**

76. Elytral disc tuberculate.

..... 77.

- Elytral disc regularly convex or depressed.

..... 78.

77. Eyes large, gena obsolete. Antennae very stout, segments 9 and 10 transverse, segment 3 shorter than segment 2. Pronotal disc punctate. Elytra with erect setae. Explanate margin of elytra narrow, steeply declivous. India.

..... **Capelocassis**

- Eyes small, gena longer than half width of eye. Antennae elongate, segments 9 and 10 distinctly longer than wide, segment 3 distinctly longer than segment 2. Pronotal disc impunctate, shiny. Elytra without erect setae. Explanate margin of elytra very broad, horizontal. E Australia.

..... **Austropsecadia**

78. Explanate margin of elytra very narrow, not wider than last two intervals. Body pubescent or/and with erect setae. Basal tooth of claw large, spiniform. Very small, length below 3.8 mm. Africa south of Congo.

..... **Trichaspis**

- Explanate margin of elytra wider than last two intervals. Dorsum usually bare, only occasionally pubescent or/and with erect setae. Basal tooth of claw never spiniform. Length usually above 3.8 mm. Old World and N America.

..... **Cassida (part.)**

79. Venter of pronotum without antennal grooves.

..... 81.

- Venter of pronotum with deep antennal grooves bordered externally by a sharp carina.

..... 80

80. Body short-oval to circular. Elytra regularly convex, highest in postscutellar point. Puncturation of disc fine to moderate, intervals in sutural half of disc distinctly wider than rows. Elytral marginalia impunctate. Dorsal surface shiny. E Asia from Korea to N Vietnam.

..... **Glyphocassis sgen. Hebdomecosta**

- Body slightly cylindrical, explanate margin steeply deflexed. Elytra in anterior part depressed, highest in posterior half. Puncturation of disc very coarse, intervals as wide as or narrower than rows. Elytral marginalia punctate. Dorsal surface opaque. Central, East and South Africa.

..... **Fornicocassis**

81. Antennae short to moderately elongate, not or only slightly dimorphic, in both sexes not extending behind the middle of metathorax.

82.

- Antennae extremely elongate, filiform, strongly sexually dimorphic, in male extending to abdomen, in female behind the middle of metathorax. Body circular, elytra with more or less developed postscutellar elevation. Explanate margin extremely broad, horizontal, almost as wide as half width of disc, impunctate. Clypeus narrow, as long as or longer than wide. Third antennal segment distinctly longer than second. From NE India to Celebes.

..... **Thlaspidosoma**

82. Anterior margin of elytra strongly arcuate, humeral angles strongly protruding anterad. Explanate margin of elytra very broad, as wide as or slightly wider than half width of disc. Elytral disc always with conical tubercle. Large, length always above 10 mm.

83.

- Anterior margin of elytra not or moderately arcuate, humeral angles slightly to moderately protruding anterad. Explanate margin of elytra from narrow to broad, usually distinctly narrower than half width of disc. Elytral disc usually without conical tubercle. Length usually below 10 mm.

84.

83. Antennae stout, segments compactly arranged, third segment only slightly longer than second, six distal segments dull and slightly longitudinally striate. Clypeus very short, at least 1.8 times as wide as long, punctate. Prosternal process narrow, only slightly expanded apically, canaliculate longitudinally. NE Australia.

..... **Emdenia**

- Antennae slim, segments loosely arranged, third segment twice to thrice longer than second, five distal segments pubescent and dull. Clypeus moderately broad, at most 1.6 times as wide as long, punctate. Prosternal process broad, strongly expanded apically, flat. Borneo, Aru Is., and New Guinea.

..... **Lorentzocassis**

84. Explanate margin of elytra steeply deflexed, sometimes perpendicular to the surface of abdomen.

85.

- Explanate margin of elytra moderately deflexed to almost horizontal.

93.

85. Elytral puncturation partly or completely regular.

86.

- Elytral puncturation completely or mostly irregular.

89.

86. Elytra regularly convex. Dorsum bare. Coloration usually uniformly yellow or green. Usually small, length below 5 mm.

87.

- Elytra with conical tubercle. Dorsum with sparse erect setae. Coloration dark brown. Pronotum widest in anterior part with angulate anterior corners. Clypeus broad, flat with fine clypeal lines. Third antennal segment distinctly shorter than second. Moderately large, length above 6 mm. S India and Malay Peninsula.

..... **Silana**

87. Body oval to cuneiform, if more or less hemispherical than pronotum without angulate anterior corners. Eyes large, gena obsolete or feebly marked.

..... 88.

- Body regularly hemispherical. Pronotum widest in anterior part, with strongly angulate anterior corners. Eyes small, gena elongate, not shorter than length of the second antennal segment. Clypeus very short, more than twice wider than long. Third antennal segment distinctly longer than second. Vietnam.

..... **Vietocassis**

88. Very small, length below 3.8 mm. Elytra in posterolateral part with longitudinal elevation. Third antennal segment shorter than second. South Africa.

..... **Limnocassis**

- Usually longer than 3.8 mm. Elytra in posterolateral part without longitudinal elevation. Third antennal segment usually longer than second. Old World and North America.

..... **Cassida** (part)

89. Explanate margin of elytra very narrow, in the widest part only slightly wider than length of two last antennal segments combined.

..... 90.

- Explanate margin of elytra broad, in the widest part distinctly wider than length of two last antennal segments combined.

..... 91.

90. Small, length below 5.5 mm. Pronotum pentagonal, widest close to base, with narrow transparent margination. Top of pronotal disc and elytra not rugose. Mediterranean Subregion, the Near East, Caucasus, and Middle Asia.

..... **Ischyronota**

- Large, length above 5.5 mm. Pronotum elliptical, widest close to the middle, without transparent margination. Whole pronotal disc and elytra rugose. Madagascar.

..... **Sphenocassis** (part)

91. Clypeus with faint or obsolete clypeal grooves.

..... 92.

- Clypeus with deep clypeal grooves converging in triangle. Pronotum with angulate sides, widest in or slightly before the middle. Pronotal disc punctate or/and wrinkled. Elytral disc sometimes costate. Explanate margin of elytra distinctly bordered from disc by a marginal row, punctate or/and wrinkled. Third antennal segment distinctly longer than second. Large, length above 5 mm. South Africa.

..... **Orobiocassis**

92. Explanate margin of elytra completely perpendicular to the surface of abdomen. Pronotum angulate on sides, with maximum width usually before middle. Pronotal

disc usually punctate. Elytral disc extremely convex, sometimes with gibbosities or tubercles, or with deep impressions. Marginal row usually absent or barely marked in anterior third of elytron, occasionally distinct along whole border of disc. Prosternal process between coxae very narrow, narrower than width of second antennal segment. Antennae stout, third segment not longer than the second, segments 8-10 wider than long or at most equal in length and width. Small, length below 4.5 mm. Mediterranean Subregion, Arabian Peninsula, NE and S Africa.

..... **Oxylepus**

- Explanate margin of elytra never completely perpendicular to the surface of abdomen. Old World and North America.

..... **Cassida (part)**

93. Clypeus distinctly elevated, especially before antennal insertions. Elytral disc depressed or regularly convex, without postscutellar elevation. Elytra and pronotum usually with black pattern on yellow or brown background.

..... 94.

- Clypeus flat. Elytral disc often with postscutellar elevation or angulate in profile. Elytra and pronotum only occasionally with black pattern on yellow or brown background.

..... 95.

94. Pronotal base bisinuate, pronotum semicircular, widest at base with distinct basal corners. Body regularly oval. Pronotal disc impunctate, shiny. Elytral base only slightly wider than pronotum. Elytral disc slightly depressed. Puncturation of disc regular, surface of disc often without special sculpture. Marginal row distinct. Explanate margin of elytra broad, impunctate and shiny. Clypeus short, triangular, convex, with deep transverse frontoclypeal sulcus. Prosternal collar long, with subangulate sides. Head cavity on sides margined by sharp carina. Third antennal segment longer than the second. Moderately large, length 5-7 mm. Madagascar.

..... **Andevocassis**

- Pronotal base not bisinuate, pronotum widest in or before the middle, no basal corners. Body broadly oval. Pronotum ellipsoidal to reversely pentagonal, sides rounded to subangulate. Disc of pronotum from impunctate, shiny, to punctate, dull. Elytral base more or less wider than pronotum. Explanate margin of elytra moderately broad, often with tendency to form a shallow gutter, its surface smooth to transversely wrinkled. Head cavity on each side usually with a sharp carina. Prosternal collar with subangulate sides. Third antennal segment distinctly longer than the second. Small to moderate, length 5-11 mm. Africa except Madagascar.

..... **Aethiopocassis**

95. Eyes large, gena obsolete or very short, always shorter than width of eye. Head cavity on sides without or with collar, but then it is continuously connected with prosternal collar.

..... 96.

- Eyes small, gena distinct, as long as width of eye. Head cavity on sides with sharp collar, distinctly separated from prosternal collar by a deep emargination. Body

almost circular. Pronotum very broad, with maximum width slightly before middle, sides rounded but posterior corners well marked. Pronotal disc microreticulate, with fine pricks, and sometimes with fine wrinkles. Explanate margin of pronotum microreticulate, impunctate with shallow striation. Elytral base only slightly wider than pronotum. Elytral disc angulate in profile. Puncturation completely irregular. Marginal row distinct in 1/3-1/2 length of elytra, in posterior half of elytra marginal row vanished between coarse puncturation of disc and marginalia. Explanate margin of elytra very broad, moderately deflexed, irregularly punctate. Clypeus very short, as long as length of first antennal segment. Antennae elongate, third segment distinctly longer than second. Moderately large, length 8-12 mm. Central And East Africa, and Madagascar.

..... **Tegocassis**

96. Apex of elytral epipleura distinctly pubescent. Antennae slim, segments 9 and 10 at least twice as long as wide. Clypeal lines separated triangular, shiny clypeal plate, usually apex of the triangle slightly elevated. Body circular. Pronotum impunctate, shiny. Elytral base distinctly wider than pronotum. Elytral disc with more or less distinct postscutellar elevation. Puncturation completely regular but partly interrupted by elytral relief. Marginal row distinct. Explanate margin of elytra very broad, horizontal, impunctate, shiny. Moderately large, 6.5-11 mm. Oriental Region from Burma to Borneo, and eastern part of the Palaearctic Region.

..... **Thlaspida**

- Combination of characters not as above. Old World and North America.

..... **Cassida (part)**

[List of species](#)

[List of genera](#)

[List of tribes](#)

[References](#)

[Home](#)