

Key for the identification of the nymphs of the leafhopper subfamily Idiocerinae in Germany

(Hemiptera: Cicadomorpha, Cicadellidae, Idiocerinae)

Marlies Stöckmann¹, Robert Biedermann¹ and Rolf Niedringhaus¹

Zusammenfassung: Erstmals werden Bestimmungsschlüssel für die Larven der in Deutschland vorkommenden Arten der Zikaden-Unterfamilie Idiocerinae vorgelegt. Anhand detaillierter dichotomer Schlüssel sind damit sämtliche 9 Gattungen und die meisten der 25 Arten bestimmbar.

Abstract: For the first time, a key for the identification of the nymphs of the leafhopper-subfamily Idiocerinae is presented for the German fauna. Dichotomous keys lead to the 9 genera and most of the 25 species. The identification is supported by more than 60 drawings, thereof habitus drawings of all species.

Key words: Auchenorrhyncha, nymphs, Idiocerinae, Germany, identification key

1. Introduction

In 2005, a project was started to develop a comprehensive key to the nymphs of plant- and leafhoppers of Germany (see Stöckmann *et al.* 2009). For the identification of the nymphs of the subfamily Idiocerinae no key is available, except a first attempt by Vilbaste (1982) for Northern Europe. This key covers only six species, is without drawings, and has some deficiencies in the species descriptions.

2. The nymphs of the subfamily Idiocerinae

In Germany, 25 species in nine genera are recorded, all living on woody plants, some of them monophagously on *Acer* spp., *Populus* spp., *Salix* spp. and *Prunus spinosa*. All species are univoltine, 14 species hibernate as egg, 11 species as adults. The nymphs (fifth nymphal stage) appear from beginning to end of June (hibernation as egg) or from end of July to beginning of September (hibernation as adults). In many cases spatio-temporal niche separation can be found in related species (Tab. 1). Especially the sometimes very narrow host plant specialisation can be used as an additional character in species identification.

¹ Carl-von-Ossietzky-Universität, Fakultät V, Institut für Biologie und Umweltwissenschaften, D-26111 Oldenburg, e-mail: rolf.niedringhaus@uni-oldenburg.de

Table 1: Spatio-temporal distribution of the species of the subfamily Idiocerinae in Germany. Hib = Hibernation, Nymph = months of occurrence of stage-V-nymphs, Frq = Frequency; Abd = Abundance (on the hostplant: 1 = low; 2 = intermediate; 3 = high, mostly after Nickel 2003, partly after Niedringhaus *et al.* 2010); ** partly incl. hybrid-forms.

Hostplant	Species of Idiocerinae	Hib.	Nymph	Frq	Abd	Distribution in Germany (C = Central, S = South)
<i>Populus nigra</i> **	<i>Rhytidodus decimusquartus</i>	egg(?)	M8-B10	2	1	all parts of Ger., esp. lowlands
	<i>Tremulicerus vitreus</i>	egg	E5-M6	2-3	3	esp. lowlands of C and S Ger.
	<i>Populicerus nitidissimus</i>	egg	E5-B7	3	3	esp. lowlands of C and S Ger.
	<i>Tremulicerus fulgidus</i>	adult	M8-B9	2	2	esp. lowlands of C and S Ger.
	<i>Stenidocerus poecilus</i>	adult	B7-M8	1	1	scattered in Ger., esp. in river floodplains
<i>Populus alba</i>	<i>Tremulicerus distinguendus</i>	egg	M6-B7	2	1	all parts of Ger., esp. lowlands
	<i>Populicerus albicans</i>	egg	M6-B7	3	3	all parts of Ger., esp. lowlands
	<i>Viridicerus ustulatus</i>	adult	E7-B10	3	1	all parts of Germany
<i>Populus tremula</i>	<i>Tremulicerus tremulae</i>	egg	B6-E6	1-2	2	esp. North and C Germany
	<i>Populicerus populi</i>	egg	B6-E6	3	3	all parts of Germany
	<i>Populicerus laminatus</i>	egg	B6-E6	1-2	(3)	all parts of Germany
<i>Salix aurita</i>	<i>Populicerus confusus</i>	egg	B6-E6	3	2/3	all parts of Germany
	<i>Idiocerus lituratus</i>	egg	B6-E6	2-3	2	all parts of Germany
	<i>Metidocerus elegans</i>	egg(?)	6(?)	1	1	scattered all over Germany
<i>Salix caprea</i>	<i>Populicerus confusus</i>	egg	B6-E6	3	2/3	all parts of Germany
	<i>Idiocerus lituratus</i>	egg	B6-E6	2-3	2	all parts of Germany
	<i>Metidocerus elegans</i>	egg(?)	6(?)	1	1	scattered all over Germany
	<i>(Idiocerus stigmatalis)</i>	egg	M6-B7	1	1	all parts of Germany
	<i>(Metidocerus rutilans)</i>	adult	M7-M8	2-3	1	esp. C and S Germany
<i>Salix cinerea</i>	<i>Populicerus confusus</i>	egg	B6-E6	3	2/3	all parts of Germany
	<i>Idiocerus lituratus</i>	egg	B6-E6	2-3	2	all parts of Germany
	<i>Metidocerus elegans</i>	egg(?)	6(?)	1	1	scattered all over Germany
	<i>(Idiocerus stigmatalis)</i>	egg	M6-B7	1	1	all parts of Germany
<i>Salix viminalis</i>	<i>Populicerus confusus</i>	egg	B6-E6	3	2/3	all parts of Germany
	<i>Metidocerus rutilans</i>	adult	M7-M8	2-3	1	esp. C and S Germany
	<i>Metidocerus impressifrons</i>	adult	M7-BIX	1	1	esp. C and S Germany
	<i>(Idiocerus stigmatalis)</i>	egg	M6-B7	1	1	all parts of Germany
	<i>Idiocerus stigmatalis</i>	egg	M6-B7	3	2/3	all parts of Germany
<i>Salix alba</i>	<i>Idiocerus herrichii</i>	adult	M7-B8	1	1	scattered all over Germany
	<i>Metidocerus rutilans</i>	adult	M7-M8	2-3	1	esp. C and S-Germany
	<i>(Populicerus confusus)</i>	egg	B6-E6	1	1	all parts of Germany
	<i>Idiocerus herrichii</i>	adult	M7-B8	1	1	scattered all over Germany
<i>Salix fragilis</i>	<i>(Metidocerus rutilans)</i>	adult	M7-M8	1	1	esp. C and S Germany
	<i>(Idiocerus stigmatalis)</i>	egg	M6-B7	1	1	all parts of Germany
	<i>(Populicerus confusus)</i>	egg	B6-E6	1	1	all parts of Germany
	<i>Metidocerus rutilans</i>	adult	M7-M8	2-3	1	esp. C and S Germany
<i>Salix triandra</i>	<i>(Metidocerus impressifrons)</i>	adult	M7-BIX	1	1	esp. C and S Germany
	<i>(Idiocerus stigmatalis)</i>	egg	M6-B7	1	1	all parts of Germany
	<i>(Populicerus confusus)</i>	egg	B6-E6	1	1	all parts of Germany
	<i>Idiocerus vicinus</i>	adult	M7-M8	1	1	esp. C and S Germany
<i>Salix eleagnos</i>	<i>(Idiocerus stigmatalis)</i>	egg	M6-B7	1	1	all parts of Germany
	<i>(Idiocerus vicinus)</i>	adult	M8-E8	1-2	(3)	S Germany
	<i>Idiocerus similis</i>	egg	B6-E6	1-2	1	esp. C and S Germany
<i>Salix purpurea</i>	<i>Idiocerus vicinus</i>	adult	M8-E8	1-2	(3)	S Germany
	<i>Metidocerus rutilans</i>	adult	M7-M8	2-3	1	esp. C and S Germany
	<i>(Idiocerus stigmatalis)</i>	egg	M6-B7	1	1	all parts of Germany
	<i>(Metidocerus impressifrons)</i>	adult	M7-BIX	1	1	esp. C and S Germany
	<i>Idiocerus lituratus</i>	egg	B6-E6	3	3	all parts of Germany
<i>Salix repens</i> (coast)						

Table 1 (continued)

Hostplant	Species of Idiocerinae	Hib.	Nymph	Frq	Abd	Distribution in Germany (C = Central, S = South)
<i>Acer pseudo-platanus</i>	<i>Acericerus heydenii</i>	adult	B8-B9	2	1	esp. C and S Germany
	<i>Acericerus vittifrons</i> (<i>Acericerus ribauti</i>)	adult	B8-E8	2	2	esp. C and S Germany
<i>Acer platanoides</i>	<i>Acericerus heydenii</i>	adult	B8-B9	1	1	esp. C and S Germany
	<i>Acericerus ribauti</i>	adult	E7-E8	1	1	esp. C and S Germany
<i>Acer campestre</i>	<i>Acericerus vittifrons</i>	adult	B8-E8	2	2	esp. C and S Germany
	<i>Acericerus ribauti</i>	adult	E7-E8	2-3	1	esp. C and S Germany
	<i>Acericerus heydenii</i>	adult	B8-B9	1	1	esp. C and S Germany
<i>Prunus spinosa</i>	<i>Balcanocerus larvatus</i>	egg	B6-B7	2-3	2/3	esp. C and S Germany
	<i>Balcanocerus pruni</i>	adult	8-9(?)	1	1(?)	SW Germany

The nymphal development of Idiocerinae follows - like in all Central European Auchenorrhyncha species - five stages (Fig. 1a). The body of the nymphs has a longish shape with a nearly parallel fore body and a narrowing abdomen. The abdomen is flattened, much broader than high (Fig. 1b). The body length (stage V) is between 3.5 mm (*Balcanocerus*) and 6 mm (*Rhytidodus*). The head is distinctly broader than the pronotum, medially not longer than laterally, the rim is more or less rounded, sometimes nearly straight.

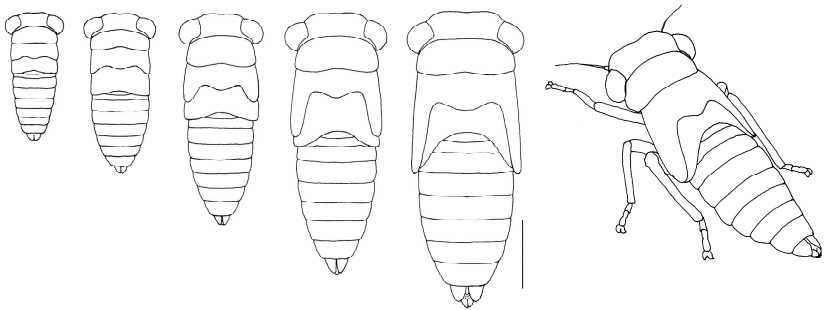


Fig. 1(a): Development of an Idiocerinae through five nymphal stages; (b) Idiocerinae from diagonally left.

In lateral view, the ventral parts of postclypeus and anteclypeus show an angle with the longitudinal axis of the body (Fig. 2a ↑↑), not parallel to longitudinal axis of body (Fig. 2b ↑↑).

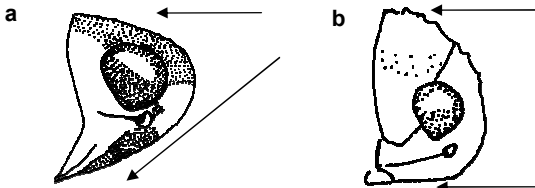


Fig. 2: Head from the right; (a) Idiocerinae, (b) Macropsinae.

The colouring is very variable, between species but also within species. The base colour ranges from entirely white over green (sometimes with many dots), greenish black and brown (sometimes with dark colouring) to nearly entirely black.

The colour, shape and distribution of body hairs are relevant characters for identification of genera:

- Body densely covered with hairs; hairs very long, dark and thick/bristly (*Idiocerus*)
- Body densely covered with hairs; hairs medium length, light and fine (*Viridicerus*)
- Body densely covered with hairs; hairs medium length, light and stiff/blunt (especially at margin of abdominal tergites) (*Balcanocerus*)
- Body densely covered with hairs; hairs very short, light and fine (*Acericerus*)
- Body only loosely covered with hairs (more dense at abdomen than at fore body); hairs light and fine (*Metidiocerus*, *Stenidiocerus*)
- Body more or less without hairs, only some fine hairs at margin of tergites (*Tremulicerus*, *Populicerus*, *Rhytidodus*)

In males the apical thickening of the antennae (palette) is already visible and can partly be used for species identification (Fig. 3). Species of the genera *Rhytidodus* and *Tremulicerus* do not have a palette.



Fig. 3: Antennae of males with and without apical thickening (palette) (left: *Populicerus*, right: *Rhytidodus*).

In some species groups, the length of the gonapophyses (rudiments of genitalia, after Dmitriev 2002) can be used for species identification. In males the outer gonapophyses (G I after Dmitriev 2002) are separated only in apical part, in females over entire length (Fig. 4↑↑).

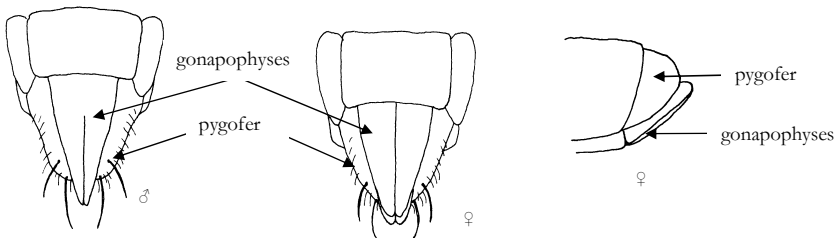
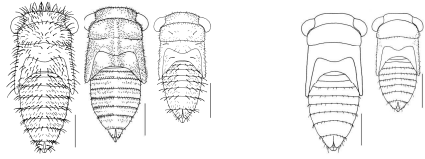


Fig. 4: Abdomen of male from below and of female from below and from left.

3 Key to genera and species of the subfamily Idiocerinae

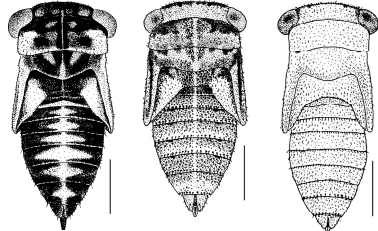
1 Body densely covered with hairs 2

- Body only loosely covered with hairs or nearly without hairs 5



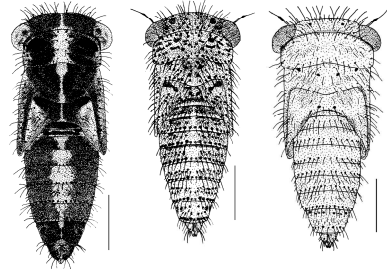
2(1) Hairs long and ± bristly (at hind margin of tergites nearly as long as tergite height) 3

- Hairs very short and fine (at hind margin of tergites less than 1/4 as long as tergite height); on *Acer* spp.; hibernation as adult, nymphs (stage V) mainly in August....***Acericerus* (3 spec.)**



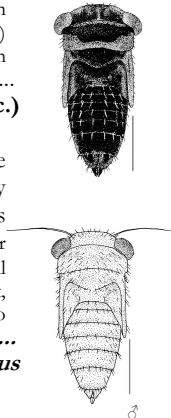
3(2) Body length over 4 mm; colouring variable: from light/dark spotted to light with ± large dots; hairs very long and dark; on *Salix* spp.; hibernation as egg (3 spec.) or adult (2 spec.), nymphs from June to August.....
..... ***Idiocerus* (5 spec.)**

- Body length below 3.5 mm; uniformly dark or light; hairs medium length and light 4



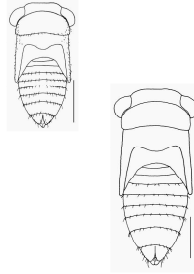
4(3) Body completely dark, abdomen with rows of stiff and blunt hairs; on *Prunus spinosa*; hibernation as egg (1 spec.) or adult (1 spec.), nymphs (stage V) from June to Sept. (?).....
..... ***Balcanocerus* (2 spec.)**

- Body completely light (alive pale green) and ♂ with conspicuously long antennae; abdomen with rows of fine hairs; on *Populus alba* in river floodplains, parks and on road verges; all parts of Germany; hibernation as adult, nymphs (stage V) from end of July to beginning of Oct.....
..... ***Viridicerus ustulatus***



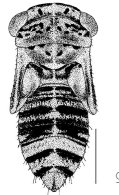
♂

5(1) Fore body loosely covered with hairs, abdomen more densely covered; hairs light and fine 6

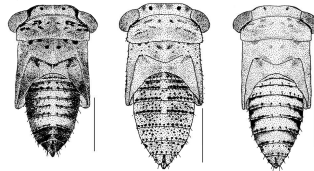


- Fore body more or less without hairs, abdomen with some fine hairs at margin of tergites 7

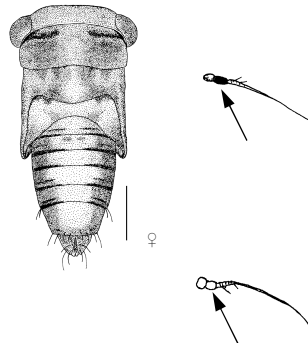
6(5) Characteristic and clear colouring at pronotum, fore wing buds with distinct longitudinal stripe; fore margin of head ± rounded, hind margin dark; on *Populus nigra* esp. in river floodplains; scattered in Germany; hibernation as adult, nymphs (stage V) from beginning of July to middle of Aug. *Stenidiocerus poecilus*



- Dark colouring of pronotum ± washy; fore wing buds at most with washy longitudinal stripe; fore margin of head ± straight, hind margin light to dark; on *Salix* spp.; hibernation as egg (1 spec.) or adult (2 spec.), nymphs (stage V) from July to Sept. *Metidiocerus* (3 spec.)

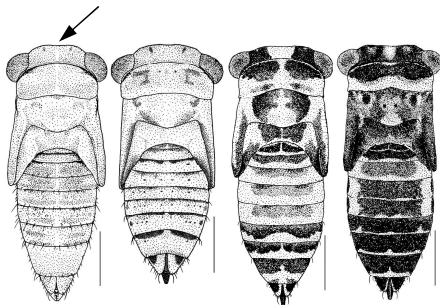


7(5) Large species (> 4.5 mm); fore body (esp. head) conspicuously broad; base colour blackish brown; second antennal segment dark and longer than broad (Fig. 1 ↑); on *Populus nigra* and hybrids; in all parts of Germany; hibernation mainly as egg (♀♀ occasionally as adult), nymphs (stage V) from middle of Aug. to beginning of Oct. *Rhytidodus decimusquartus*

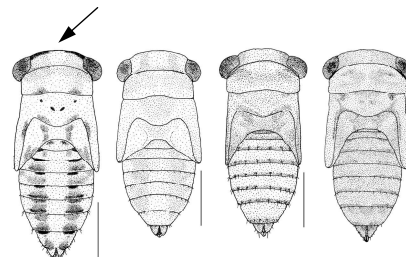


- Mostly smaller than 4.5 mm; base colour often green; second antennal segment light and not longer than broad (Fig. 2 ↑) 8

8(7) Body length > 4 mm; ♂ antennae apically thickened; fore margin of head slightly indented (↑); on *Populus* spp. and *Salix* spp.; hibernation as egg, nymphs (stage V) mainly in June.....
 ***Populicerus* (5 spec.)**

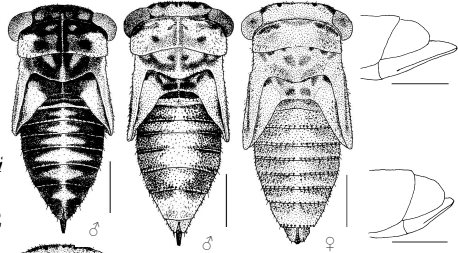


- Body length < 4 mm; ♂ antennae apically not thickened; fore margin of head not indented (↑); on *Populus* spp.; hibernation as egg (3 spec.) or adult (1 spec.), nymphs (stage V) from end of May to beginning of Sept.....
 ***Tremulicerus* (4 spec.)**

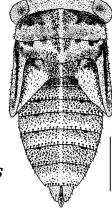


Acericerus

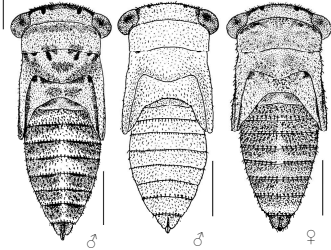
- 1 Gonapophyses in ♂ elongated and dark; body broad and flat; on *Acer* (esp. *pseudoplatanus*); esp. in Central and South Germany; hibernation as adult, nymphs (stage V) beginning of Aug. to beginning of Sept. ***A. heydenii***
- Gonapophyses in ♂ not elongated and not dark..... **2**



- 2(1)** Head only slightly rounded medially; on *Acer* (esp. *pseudoplatanus* and *campestre*); esp. in Central and South Germany; hibernation as adult, nymphs (stage V) from beginning to end of Aug..... ***A. vittifrons***



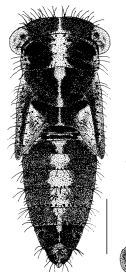
- Head more rounded medially; on *Acer* (esp. *campestre*); esp. in Central and South Germany; hibernation as adult, nymphs (stage V) from end of July to end of Aug..... ***A. ribauti***



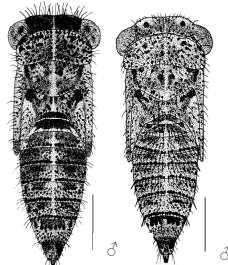
Idiocerus

- 1 Upper side dark-spotted to nearly entire dark; on *Salix purpurea* (*S. eleagnos*)... .. **2**
- Upper side light (green) with ± many and large dark dots; on other *Salix* spp..... **3**

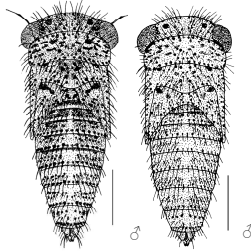
- 2(1)** Upper side black with light median line, often light colouring at tergite 7; head ± slender (up to ca. 1.9 mm) and fore margin rounded; eyes alive light; on *Salix purpurea*; esp. in Central and South Germany; hibernation as egg, nymphs (stage V) from beginning to end of June ***I. similis***



- Upper side ± dark with many confluent dark spots or dots; head ± broad (up to ca. 2.1 mm) and fore margin ± straight; on *Salix purpurea*; sometimes on *S. eleagnos*; only in South Germany; hibernation as adult, nymphs (stage V) from middle to end of Aug..... ***I. vicinus***

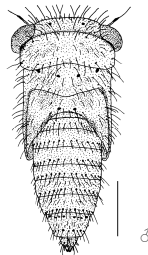


- 3(1) Head slender (1.8-2.1 mm) and fore margin rounded; body light with \pm many dark dots; colouring of head variable: from light with four larger spots to \pm dark with non-confluent spots; mainly on hairy-leaved willows (*Salix cinerea*, *aurita*, *caprea*, *repens* in coastal dunes); esp. in cool and wet habitats; in all parts of Germany; hibernation as egg, nymphs (stage V) from beginning to end of June ***I. lituratus***

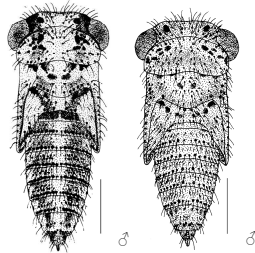


- Head broad (2.0-2.2 mm) and fore margin \pm straight; colouring of head variable; on *Salix alba* and *fragilis*.....4

- 4(3) Fore body conspicuously broad, body light (green) with at most small dots; in the vicinity of waters esp. on narrow-leaved willows (esp. *Salix alba*, also on *fragilis*, *triandra*, *eleagnos*, *viminalis*, *purpurea*, *caprea*, *cinerea*); in all parts of Germany; hibernation as egg, nymphs (stage V) from middle of June to beginning of July..... ***I. stigmatalis***

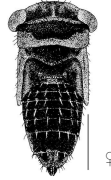


- Entire body \pm slender, body light (green) with many, partly larger confluent spots; in the vicinity of waters on *Salix alba* and *S. fragilis*; scattered in all parts of Germany; hibernation as adult, nymphs (stage V) from middle of July beginning of Aug. ***I. herrichi***



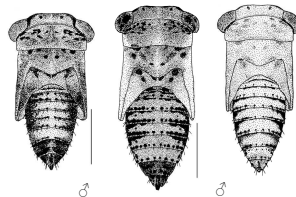
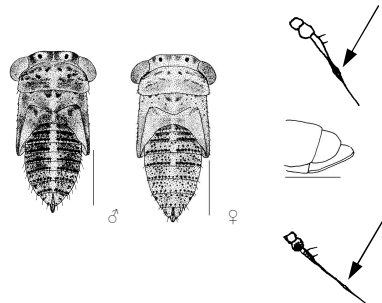
Balcanocerus

- 1 Very small and only slightly flattened, fore margin of head rounded; body very dark and strongly covered with hairs, hairs light; hairs at abdomen stiff, protruding and with blunt ends; on *Prunus spinosa* in sunny, bushy habitats (esp. hedgerows, forest edges); esp. in Central and South Germany; hibernation as egg, nymphs (stage V) from beginning of June to beginning of July **B. larvatus**
- Probably no differences in habitus to *B. larvatus* (no material available); on *Prunus spinosa* in sunny, bushy habitats at warm sites (esp. hedgerows); only in Southwest Germany; hibernation as adult, nymphs (stage V) probably in Aug./Sept.
..... **B. pruni**



Metidiocerus

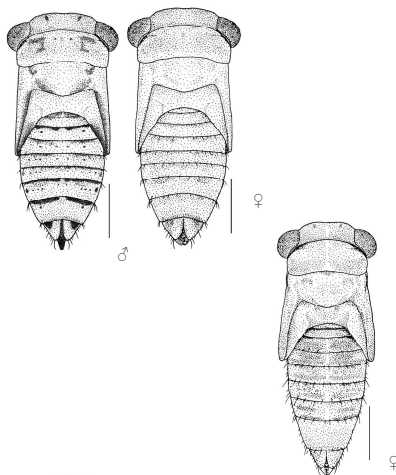
- 1 ♂ with distinct thickening at antennae(↑); ♀ with long gonapophyses; esp. in floodplains in the vicinity of waters; on small-leaved willows (esp. *Salix viminalis*, occasionally on *S. purpurea* and *triandra*); esp. in Central and South Germany, hibernation as adult, nymphs (stage V) from middle of July to beginning of Sept.
..... **M. impressifrons**
- ♂ with only slightly thickened antennae; ♀ with short gonapophyses ..
..... 2
- 2(1) ♂ with only slightly thickened antennae; ♀ with short gonapophyses; on small-leaved willows (*Salix viminalis*, *purpurea*, *triandra*, *alba*, occasionally on *S. elegans*, *fragilis*, *caprea*); esp. in Central and South Germany; hibernation as adult, nymphs (stage V) from middle of July to middle of Aug. **M. rutilans**
- Probably no differences in habitus to *M. rutilans* (no material available); in cool and moist habitats on grey-leaved willows (*Salix caprea*, *cinerea*, *aurita*); scattered in all parts of Germany, hibernation as egg (?), nymphs probably in June **M. elegans**



Populicerus

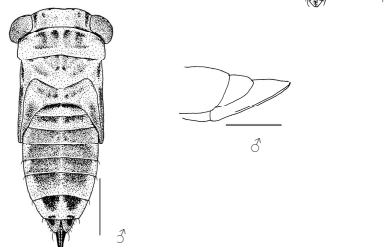
1 Base colour white with \pm slight dark colouring; in floodplains, parks, on road verges; on *Populus alba*; in all parts of Germany, esp. in the lowlands; hibernation as egg, nymphs (stage V) from middle of June to beginning of July ***P. albicans***

- Base colour not white; not on *Populus alba* **2**



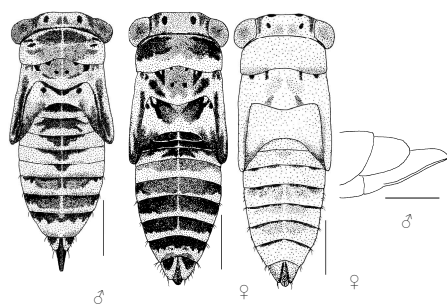
2(1) Base colour single-coloured greenish-yellow; on willows, in floodplains and wet habitats; mainly on grey-leaved (*Salix cinerea, aurita, caprea, viminalis*); in all parts of Germany; hibernation as egg, nymphs (stage V) from beginning to end of June ***P. confusus***

- Base colour green or light brown; on *Populus* **3**



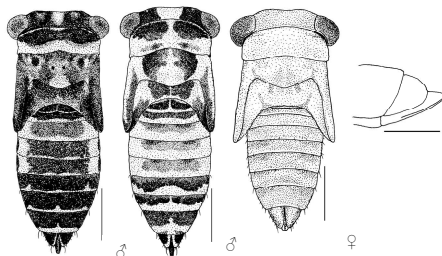
3(1) Gonapophyses of ♂ long; on *Populus nigra*; in floodplains, on cultural land and in urban settlements; esp. in lowlands of Central and South Germany; hibernation as egg, nymphs (stage V) from end of May to beginning of July ***P. nitidissimus***

- Gonapophyses of ♂ short or long; on *Populus tremula* **4**



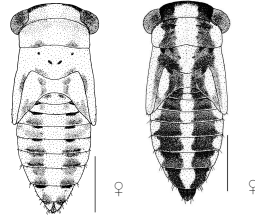
4(3) Gonapophyses of ♂ long; on *Populus tremula*; in all parts of Germany; hibernation as egg, nymphs (stage V) from beginning to end of June ***P. laminatus***

- Gonapophyses of ♂ short; on *Populus tremula*; in all parts of Germany; hibernation as egg, nymphs (stage V) from beginning to end of June ***P. populi***

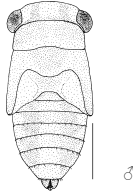


Tremulicerus

1 Upper side light with two dark longitudinal stripes; on *Populus alba*; in floodplains, on cultural land and in urban settlements; in all parts of Germany, esp. in the lowlands; hibernation as egg, nymphs (stage V) from middle of June to beginning of July.....

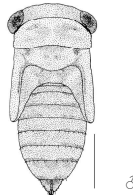


..... ***T. distinguendus***
 - Upper side light, but without longitudinal stripes; on *Populus nigra* or *tremula*..... 2



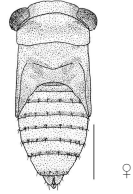
2(1) On *Populus tremula*; esp. in North and Central Germany; hibernation as egg, nymphs (stage V) from beginning to end of June ***T. tremulae***

- On *Populus nigra*; esp. in the lowlands of Central and South Germany 3



3(2) Hibernation as egg, nymphs (stage V) from end of May to middle of June; on *Populus nigra*; esp. in the lowlands of Central and South Germany ***T. vitreus***

- Hibernation as adult, nymphs (stage V) from middle of Aug. to beginning of Sept.; on *Populus nigra*; esp. in the lowlands of Central and South Germany..... ***T. fulgidus***



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Appendix: Nymphs (stage V) examined

Coll RR = collection Reinhard Remane, Dresden; coll HN = collection Herbert Nickel, Göttingen; otherwise collection Niedringhaus/Stöckmann, Oldenburg

- A. beydenii*: 1 ♀: N Ger: Gimte/Hannoversch Münden (04.VIII.1991), coll. HN; 1 ♂: N Ger: Göttingen (06.VIII.08), coll. HN; 3 ♂♂: N Luxembourg: Bockholz (36/18, 09.IX.04); 1 ♂: C Luxembourg: Steinsel (92/50, 17.VIII.06).
- A. vittifrons*: 5 ♂♀: N Ger: Groß Lengden/Göttingen (07.VIII.1991), coll. HN; 1 ♀: C Luxembourg: Nommern (59/25, 17.VIII.06).
- A. ribauti*: 3 ♂♀: NW Ger: Oldenburg (25.VIII.07); 2 ♂♀: NW Ger: Drielaker See/Oldenburg (25.VII.07); 2 ♂♂ (exuvia, reared): NW Ger: Oldenburg (28.VIII.04); 1 ♂: S Ger: Schweinsberg/Bay.Wald (26.VIII.1996), coll. RR.
- Balcanocerus larvatus*: 1 ♂: Central Ger: Neu-Morschen/Melsungen (03.VI.00), coll. RR; 1 ♀: C Luxembourg: Heisdorf (92/24, 01.VII.04); 1 ♂: S Luxembourg: Mamer (101/21, 30.VI.04).
- Balcanocerus pruni*: no nymph available.
- Idiocerus stigmatalis*: 3 ♂♀: NW Ger: Heiliges Meer/Steinfurt (20.VI.07); 5 ♂♀: N Ger: Wümmewiesen/Scheeßel (28.VI.2006); 1 ♂, 2 ♂♀ (exuvia, reared): S Ger: Bayerischer Wald (01.VII.07); 1 ♀: C Luxembourg: Consdorf (61/11, 24.VI.03).
- Idiocerus lituratus*: 8 ♂♀: NW Ger: Island of Langeoog (29.VI.06); 5 ♂♀: NW Ger: Island of Memmert (25.VI.1985); 1 ♀: N Ger: Wümmewiesen/Scheeßel (28.VI.06); 1 ♂ (exuvia, reared): N Ger: Heiliges Meer/Steinfurt (20.VI.07); 1 ♂: Central G: Klein-Steinberg (13.VI.1991), coll. HN.
- Idiocerus similis*: 1 ♀: NW Ger: Bornhorster See/Oldenburg (10.VI.07); 1 ♀ (exuvia, reared): NW Ger: Bornhorster See/Oldenburg (11.VI.07); 1 ♂: Central Ger: Schweinfurt (16.VI.1994) coll. HN.
- Idiocerus vicinus*: 7 ♂♀: S Ger: Ramsau (11.VIII.1997), coll. HN; 1 ♂: S Ger: Vorderriss (22.VIII.1998), coll. HN.
- Idiocerus herrichii*: 1 ♀: NW Ger: Drielaker See/Oldenburg (25.VII.2007); 1 ♀ (exuvia, reared): NW Ger: Drielaker See/Oldenburg (27.VII.2007); 2 ♂♀: Central Ger: Dettelbach (13.VII.07), coll. HN; 1 ♀: Central Ger: Stausebach/Marburg (08.VIII.1996), coll. RR; 1 ♂: Central Ger: Schröck/Marburg (26.VII.1996), coll. RR.
- Metidiocerus elegans*: no nymph available.
- Metidiocerus rutilans*: 1 ♂ (exuvia, reared): NW Ger: Oldenburg (31.VII.07); 4 ♂♀: Central Ger: Marburg (19.VII.1995), coll. RR; 4 ♂♀: C Luxembourg: Gosseldange (81/44, 18.VIII.06).
- Metidiocerus impressifrons*: 2 ♂♀: Central Ger: Dettelbach (13.VII.1994), coll. HN; 4 ♂♀: E Ger: G Zodel/Oder (01.IX.1996), coll. HN; 3 ♂♀: S Ger: St. Ludwig (12.VII.1994), coll. HN; 1 ♂ (exuvia, reared): Central Ger: Bauerbach/Marburg (31.VII.1996), coll. RR; 2 ♂♀: S Luxembourg: Sanem (118/27, 30.VII.06).
- Populicerus nitidissimus*: 1 ♀: N Ger: Göttingen (04.VII.06), coll. HN; 3 ♂♂: C Luxembourg: Platen (67/22, 08.VI.06); 1 ♂: S Luxembourg: Waldbredimus (123/24, 26.V.05); 3 ♂♀: S Luxembourg: Remich (124/21, 26.V.05); 1 ♂: S Luxembourg: Esch Sur Alzette (128/20, 27.V.05).
- Populicerus laminatus*: 1 ♂: NW Ger: Krusenbusch/Oldenburg (05.VI.2007), 4 ♂♀ (exuvia, reared): NW Ger: Krusenbusch/Oldenburg (06.VI.2007).
- Populicerus populi*: 4 ♂♀: NW Ger: Krusenbusch/Oldenburg (05.VI.2007); 6 ♂♀ (exuvia, reared): NW Ger: Krusenbusch/Oldenburg (07.VI.2007); 1 ♀: C Luxembourg: Bissen (57/22.07.VI.06).
- Populicerus confusus*: 1 ♀: NW Ger: Lingen (15.VI.2005); 3 ♂♀: N Luxembourg: Hautbellain (1/9, 28.VI.04); 3 ♀♀: N Luxembourg: Holzthum (22/12, 24.VI.05).

- Populicerus albicans*: 4 ♀♀: Central Ger: Schweinfurt (16.VI.1994), coll. HN; 1 ♂: Central Ger: Rhön (13.VI.1996), coll. RR; 1 ♀: C Luxembourg: Reckange (69/15, 01.VII.04).
- Rhytidodus decimusquartus*: 1 ♀: N Ger: Göttingen (15.IX.1991), coll. HN; 2 ♀♀: Central Ger: Heskem/Marburg (02.X.1995), coll. RR; 3 ♂♂: C Luxembourg: Ettelbrück (46/25, 16.VIII.06); 2 ♂♂: C Luxembourg: Rosport 63/12 (11.VIII.04).
- Stenidocerus poecilus*: 1 ♀ (exuvia, reared): Central Ger: Bot. Garden Marburg (09.VII.1992), coll. RR; 1 ♀: C Luxembourg: Ettelbrück (46/25, 16.VIII.06); 2 ♂♂: C Luxembourg: Rosport (63/12, 11.VIII.04); 1 ♀: S Luxembourg: Bertrange (110/25, 31.VII.06).
- Tremulicerus distinguendus*: 2 ♂♀: NW Ger: Varel/Dangast (16.VI.07); 1 ♀: Central Ger: Bot. Garden Marburg (09.VII.1992), coll. RR.
- Tremulicerus tremulae*: 4 ♂♀: NW Ger: Krusenbusch/Oldenburg (05.VI.2007); 2 ♂♀ (exuvia, reared): NW Ger: Krusenbusch/Oldenburg (06.VI.2007).
- Tremulicerus fulgidus*: 1 ♂: Central Ger: Marburg (02.X.1995), coll. RR; 3 ♂♀: C Luxembourg: Ettelbrück (46/25, 16.VIII.2006); 5 ♂♀: C Luxembourg: Colmar-Berg (57/17, 08.IX.04); 21 ♂♀: C Luxembourg: Rosport (63/12, 11.VIII.04).
- Tremulicerus vitreus*: 15 ♂♀: C Luxembourg: Platen (67/22, 08.VI.06); 3 ♂♀: S Luxembourg: Remich (124/21, 26.V.05).
- Viridicerus ustulatus*: 3 ♂♀: NW Ger: Drielaker See/Oldenburg (25.VII.07); 2 ♀♀: Central Ger: Heskem/Marburg (08.X.1996), coll. RR; 5 ♂♀: S Luxembourg: Mamer (101/4, 22.VII.04).