

A key to the non-lichenicolous species of the genus *Capronia* (*Herpotrichiellaceae*)

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Summary: A key to the non-lichenicolous *Capronia* species is presented and *Capronia holmiorum* is proposed as a *nomen novum* to replace *Capronia collapsa* (K. Holm & L. Holm) O.E. Erikss. *nom. illeg.* Several names placed in the genera *Berlesiella*, *Capronia*, *Dictyotrichiella* and *Herpotrichiella* are discussed at the end of the key.

Keywords: Ascomycota, Chaetothyriales, Herpotrichiellaceae, key, *nomen novum*.

Zusammenfassung: Ein Schlüssel zu den nicht-lichenicolonen Arten der Gattung *Capronia* wird präsentiert. *Capronia holmiorum* wird als *nomen novum* vorgeschlagen um *Capronia collapsa* (K. Holm & L. Holm) O.E. Erikss. *nom. illeg.* zu ersetzen. Einige Namen der Gattungen *Berlesiella*, *Capronia*, *Dictyotrichiella* und *Herpotrichiella* werden am Ende des Schlüssels diskutiert.

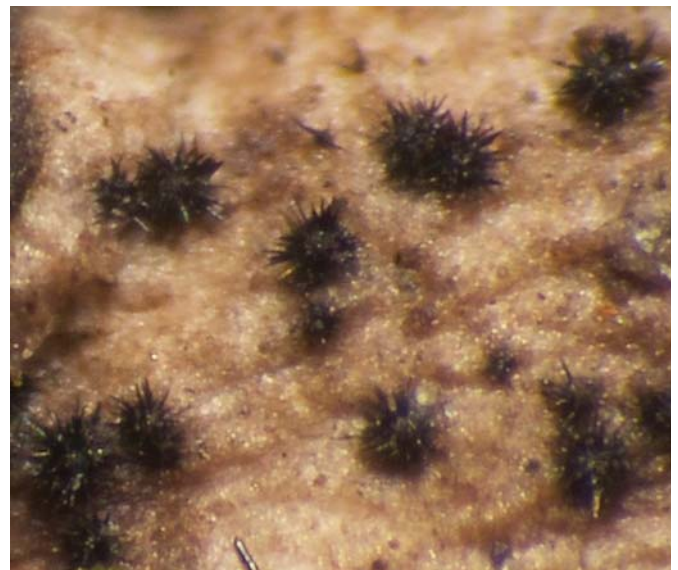
Schlüsselwörter: Ascomycota, Chaetothyriales, Herpotrichiellaceae, Schlüssel, *nomen novum*.

Introduction

The genus *Capronia* Sacc. is characterized by typically small, dark and setose ascomata, fissitunicate, 8- to polysporous asci, septate ascospores and the absence of interascal filaments (BARR, 1991; MÜLLER *et al.*, 1987; RÉBLOVÁ, 1996). *Capronia* species are surprisingly little studied by amateur mycologists, even though almost 70 described species are known. One of the reasons why such little attention is paid to *Capronia* species might be the difficulty of finding them. Some species are common on rotten wood, old fungi or other organic material, yet easily overlooked due to their typically small and inconspicuous ascomata.

Possibly the most important reason why *Capronia* species tend to be avoided by mycologists, however, might be the lack of a comprehensive treatment of the genus. Although there are two papers containing keys to a number of species (BARR, 1991; MÜLLER *et al.*, 1987), several problems with identification remain. Both keys contain different species and the outcome often varies depending on which key is used. Furthermore, several species have been described or combined to *Capronia* during the last twenty years and the knowledge of species has increased.

The aim of the present paper is to provide a help for mycologists to determine collections of *Capronia* based on teleomorphic characteristics. However, many species are known only from a single or very few collections (UNTEREINER *et al.*, 2011) and morphological features are known to vary to a certain extent (UNTEREINER, 2000). It is therefore often difficult to separate species properly by using only teleomorphic characteristics. Thus, it is important to understand that the key is intended as an initial help for determination and that



Ascomata of a *Capronia* species

it is necessary to consult the given literature for more detailed information.

For important remarks on the genus *Capronia* — concerning the significance of morphological and molecular characteristics used for taxonomy — see UNTEREINER (2000).

The key is based on all *Capronia* species listed in *Index Fungorum* and *Mycobank* databases, but excludes lichenicolous species. A key to the lichenicolous taxa is provided by HALICI *et al.* (2010). Important data on species which the author has not yet examined are taken from the cited literature (see also the note at the beginning of the key below).

An often overlooked characteristic of *Capronia* species is the reaction of the ascal gel to IKI (Lugol's solution) (WINKA *et al.*,

1998; UNTEREINER, 2000). This reaction is rather unknown due to the usage of Melzer's reagent instead of IKI and appears to be consistent in several species (BARAL, pers. comm.). Consequently, the reaction to IKI should be tested in future studies of the genus.

Compared to other genera of the Ascomycota, it is quite likely to find *Capronia* species which do not fit to any descriptions of the known taxa. Such unidentified collections are not mentioned here because including them would result in a considerably larger and less user-friendly key. Furthermore, several collections need to be recollected and examined with different methods to affirm that they are truly independent species. It would therefore be premature to include them here.

Key

The information indicated by the symbols used in the key is based on all the literature the author was able to consult (not only the references cited in the key) and personal experience.

- The author examined at least one collection of this species.
- (◦) The author has studied this species only based on collections whose identification remained doubtful.
- This species is known surely only from the type collection or less than three collections by the type author.
- ⌘ Growing on herbaceous substrate or leaves.
- ★ Growing on lignicolous substrate (including woody dwarf shrubs, excluding *Ericaceae*)
- ◇ Growing on *Ericaceae*.
- ▼ Fungicolous species.
- ◆ Graminicolous species.
- This species has been described from cultures *in vitro*.
- ? A question mark after one of the above mentioned symbols indicates that the information is uncertain.
- [] Brackets around one of the above mentioned symbols indicate that the information applies only to some collections of this species.

- 1 Asci 32-spored 2
- 1* Asci (3)8- to (8)16-spored 4
- 2 Ascospores muriform *C. irregularis* ●◇
Capronia irregularis M.E. Barr, *Contributions from the University of Michigan Herbarium*, 9: 616 (1972)
 Bibl.: BARR (1972: 616)
 Ill.: BARR (1972: fig. 151–152)
- 2* Ascospores not muriform, without longitudinal septa ...3
- 3 Ascospores with 1–3 transverse septa
 *C. polyspora* ◇★
Capronia polyspora (M.E. Barr) E.Müll., Petrini, P.J. Fisher, Samuels & Rossman, *Transactions of the British Mycological Society*, 88(1): 73 (1987)
 Basionym: *Herpotrichiella polyspora* M.E. Barr, *Contributions de l'Institut Botanique de l'Université de Montréal*, 73: 29 (1959)
 = *Polytrichiella polyspora* (M.E. Barr) M.E. Barr, *Contributions from the University of Michigan Herbarium*, 9: 617 (1972)
 Bibl.: BARR (1959: 29), HOLM (1975a: 154), SIERRA LÓPEZ (2006: 77 f.)
 Ill.: BARR (1959: fig. 42–43), BARR (1987: pl. 10 H), SIERRA LÓPEZ (2006: fig. 2, b–c; lám. 1 a)
- 3* Ascospores with (1)3–5 transverse septa.. *C. villosa* ●★

Capronia villosa Samuels, *Transactions of the British Mycological Society*, 88(1): 70 (1987)
 Bibl.: MÜLLER et al. (1987: 70 f.)
 Ill.: MÜLLER et al. (1987: fig. 4 D)

- 4 (1*) Asci (8)16-spored 5
- 4* Asci (3)8-spored 11
- 5 Ascospores 35–60 µm long 6
- 5* Ascospores shorter 7
- 6 Ascospores with 6–12 transverse septa, 3–3.5 µm broad
 *C. apiculata* ●★
Capronia apiculata M.E. Barr, *Mycotaxon*, 41(2): 423 (1991)
 Bibl.: BARR (1991: 423)
 Ill.: BARR (1991: fig. 1–3)
 Note: According to BARR (1991), ascospore shape of *C. apiculata* is similar to *C. fungicola* (see note under 42) but this species is said to possess shorter ascospores and setose ascomata.
- 6* Ascospores with 3–7 transverse septa, 1.5–2.5 µm broad *C. longispora* ●⌘
Capronia longispora (M.E. Barr) E.Müll., Petrini, P.J. Fisher, Samuels & Rossman, *Transactions of the British Mycological Society*, 88(1): 73 (1987)
 Basionym: *Polytrichiella longispora* M.E. Barr, *Contributions from the University of Michigan Herbarium*, 9: 617 (1972)
 Bibl.: BARR (1972: 617 f.)
 Ill.: BARR (1972: fig. 156)
- 7 (5*) Ascospores only with 1 transverse septum
 *C. albimontana* ●⌘
Capronia albimontana (M.E. Barr) E.Müll., Petrini, P.J. Fisher, Samuels & Rossman, *Transactions of the British Mycological Society*, 88(1): 73 (1987)
 Basionym: *Polytrichiella albimontana* M.E. Barr, *Contributions from the University of Michigan Herbarium*, 9: 617 (1972)
 Bibl.: BARR (1972: 617)
 Ill.: BARR (1972: fig. 153–155)
- 7* Ascospores with transverse and longitudinal septa 8
- 8 Ascospores hyaline *C. sexdecimspora* ●★
Capronia sexdecimspora (Cooke) Sacc., *Sylloge Fungorum*, 2: 289 (1883) (as "sexdecimspora")
 Basionym: *Sphaeria sexdecimspora* Cooke, *Handbook of British Fungi*, 2: 860 (no. 2574) (1871) (as "sexdecimspora")
 Bibl.: COOKE (1871: 860), SACCARDO (1883: 289), BERLESE (1900: 102 f.)
 Note: Type species of the genus.
- 8* Ascospores coloured 9
- 9 Ascospores 8–10 µm long *C. exigua* ●⌘▼
Capronia exigua M.E. Barr, *Mycotaxon*, 41(2): 429 (1991)
 Bibl.: BARR (1991: 429)
 Ill.: BARR (1991: fig. 17–18)
- 9* Ascospores longer 10
- 10 Ascospores ovoid, with obtuse ends, 15–20 × 7–10 µm
 *C. juniperi* ●★
Capronia juniperi Richon, *Bulletin de la Société Botanique de France*, 34: 60 (1887)
 = *Caproniella juniperi* (Richon) Berl., *Icones Fungorum*, 2: 62 (1899)
 Bibl.: RICHON (1887: 60), BERLESE (1900: 62 f.)
 Ill.: RICHON (1887: pl. II, fig. 2), BERLESE (1900: tab. XCIII 1)
 Note: For the somewhat confusing use of the genus *Caproniella* by Berlese see HOLM (1975b).
- 10* Ascospores broadly ellipsoidal, ends often ± tapering, 11–18 × 5–9 µm *C. pleiospora* ◦★
Capronia pleiospora (Mouton) Sacc., *Sylloge Fungorum*, 9: 899 (1891)
 Basionym: *Melanomma pleiosporum* Mouton, *Bulletin de la Société Royale de Botanique de Belgique*, 25: 154 (1886)

≡ *Caproniella pleiospora* (Mouton) Berl., *Icones Fungorum*, 2: 63 (1899) (as “*plejospora*”)

Bibl.: MOUTON (1886: 154), BERLESE (1900: 63), MUNK (1953a: 133), MUNK (1957: 440), ELLIS & ELLIS (1997: 574)

Ill.: BERLESE (1900: tab. XCIII), MUNK (1957: fig. 183 a–c), BARR (1991: fig. 23–24), ELLIS & ELLIS (1997: fig. 2126)

11 (4*) Ascospores submuriform to muriform, with at least 1 longitudinal septum 12

11* Ascospores only with transverse septa 36

12 1–2(3) cells of the ascospores with a longitudinal septum 13

12* More cells of the ascospores with a longitudinal septum and/or ascospores distinctly muriform 22

13 Ascomata mostly stromatic on old pyrenomycetes, ascospores usually ± inequilateral, often clavate and slightly bent 14

13* Ascomata not stromatic, usually on different substrate 15

14 Ascomata with setae, ascospores up to 18 µm long, with 3–5 transverse septa *C. nigerrima* °▼

Capronia nigerrima (R.R. Bloxam) M.E. Barr, *Mycotaxon*, 41(2): 431 (1991)

For synonyms see BIGELOW & BARR (1969).

Notes: For a list of illustrations see UNTEREINER & NAVEAU (1999). Most of these references also include descriptions of this species. For further descriptions and illustrations also see MUNK (1953a: 133; 1957: 441) and SIEPE (1997: 43 f.).

Berlesiella hirtella is most likely identical with *C. nigerrima* since the original description of *B. hirtella* does not give any clear differences to the latter species. However, it seems to be necessary to examine the type specimen of *B. hirtella* to confirm the conspecificity. CHENANTAIS (1921) reduced *B. hirtella* to a variety of *C. nigerrima*.

Berlesiella hirtella (Bacc. & P. Avetta) Sacc., *Revue mycologique*, 10: 8 (1888)

Basionym: *Cucurbitaria hirtella* Bacc. & P. Avetta, *Annuario del Reale Istituto Botanico di Roma*, 1: 175 (no. 83) (1885)

Bibl.: BECCARINI & AVETTA (1885: 175), SACCARDO (1891: 914)

Ill.: BECCARINI & AVETTA (1885: tav. XVI, fig. 5), BERLESE (1900: fig. CXLIII 2)

14* Ascomata glabrous, ascospores up to 24 µm long, with 5–7 transverse septa *C. episphaeria* ●▼

Capronia episphaeria (Peck) M.E. Barr, *Mycotaxon*, 41(2): 429 (1991)

Basionym: *Dothidea episphaeria* Peck, *Annual Report on the New York State Museum of Natural History*, 30: 64 (1878) [1877]

≡ *Phyllachora episphaeria* (Peck) Sacc., *Sylloge Fungorum*, 2: 608 (1883)

≡ *Berlesiella episphaeria* (Peck) M.E. Barr, *Mycotaxon*, 29: 502 (1987)

Bibl.: PECK (1878: 64)

Ill.: BARR (1987: pl. 10 J)

15 (13*) Ascospores 25–36 µm long *C. populicola* ●★

Capronia populicola M.E. Barr, *Mycotaxon*, 41(2): 431 (1991)

Bibl.: BARR (1991: 431)

Ill.: BARR (1991: fig. 25–26)

15* Ascospores shorter 16

16 Ascospores 3–4.5(5) µm broad *C. pulcherrima* °★

Capronia pulcherrima (Munk) E.Müll., Petrini, P.J. Fisher, Samuels & Rossman, *Transactions of the British Mycological Society*, 88(1): 73 (1987)

Basionym: *Dictyotrichiella pulcherrima* Munk, *Dansk Botanisk Arkiv*, 15(2): 132 (1953)

Bibl.: MUNK (1953a: 132), MUNK (1957: 440), DENNIS (1981: Add. 33), SCHMID-HECKEL (1988: 42), SCHMID & SCHMID (1991: no. 69), ELLIS & ELLIS (1997: 27), UNTEREINER (1997: 127)

Ill.: MUNK (1953b: 2 b), MUNK (1957: fig. 181 b), DENNIS (1981: fig. 35 S), SCHMID-HECKEL (1988: Abb. 15 d), SCHMID & SCHMID (1991: no. 69), ELLIS & ELLIS (1997: fig. 99), UNTEREINER (1997: fig. 20–30)

Note: *C. mycophila* basically resembles *C. pulcherrima* and possibly differs only in growing on polypores (known from *Antrrodia xantha*).

Capronia mycophila Schmid-Heckel, *Nationalpark Berchtesgaden Forschungsbericht*, 15: 41 (1988)

Bibl.: SCHMID-HECKEL (1988: 41 f.)

Ill.: SCHMID-HECKEL (1988: Abb. 16)

16* Ascospores broader than 5 µm 17

17 Ascospores usually without but rarely with a longitudinal septum in one cell, up to 21 µm long *C. montana*

Notes: See number 42* in the key. If ascospores are up to 27.5 µm long see *C. borealis* (43*) which might also rarely possess a longitudinal septum in one cell (BARR, 1991).

17* Ascospores usually with at least 1 longitudinal septum 18

18 Ascospores up to 20(21) µm long or shorter 19

18* Ascospores up to 22.5(25) µm long 21

19 Ascospores slightly clavate, often ± inequilateral or even somewhat bent, ascomata not collabent

..... *C. semi-immersa* °★

Capronia semi-immersa (Cand. & Sulmont) Unter. & F.A. Naveau, *Mycologia*, 91(1): 73 (1999) (as “*semiimmersa*”)

Basionym: *Dictyotrichiella semi-immersa* Cand. & Sulmont, *Revue de mycologie*, 36: 242 (1971) (as “*semiimmersa*”)

= *Capronia svrcekiana* Réblová, *Czech Mycology*, 49(2): 82 (1996)

Notes: For illustrations see the references given by UNTEREINER *et al.* (2008). These references also include descriptions of this species.

UNTEREINER *et al.* (2008) conclude that *C. svrcekiana* has to be considered a synonym of *C. semi-immersa*.

Pleosphaeria patagonica is similar to *C. semi-immersa* in several aspects. CANDOUSSAU & SULMONT (1971) argue that *P. patagonica* differs from *C. semi-immersa* in superficial ascomata, septate hairs, ascospores with four transversal septa and a different host. However, the position of the ascomata of *C. semi-immersa* on the substrate is known to vary (UNTEREINER & NAVEAU, 1999) and also the septation of the setae is a characteristic which may vary to a certain extent. Furthermore, SPEGAZZINI (1887) gives 3–5 transversal septa of the ascospores in the protolouge of *P. patagonica* and not 4 septa as mentioned by Candoussau & Sulmont (who also give 3–5 transversal septa for *D. semi-immersa*). Unfortunately, the type of *P. patagonica* seems to be lost according to Candoussau & Sulmont. *Pleosphaeria patagonica* f. *salicis*, described from France, is similar to f. *patagonica* except for slightly smaller ascospores with 3, rarely 4 transverse septa.

Pleosphaeria patagonica f. *patagonica* Speg., *Boletín de la Academia Nacional de Ciencias de Córdoba*, 11: 53 (no. 149) (1887)

Bibl.: SPEGAZZINI (1887: 53 f.), BERLESE (1900: 64)

Pleosphaeria patagonica f. *salicis* Rolland & Fautrey, *Revue mycologique*, 16: 74 (1894)

Bibl.: ROLLAND & FAUTREY (1894: 74), BERLESE (1900: 64)

Ill.: ROLLAND & FAUTREY (1894: tab. CXLI, fig. 8), BERLESE (1900: tab. XCV 1)

19* Ascospores not so, ascomata collabent 20

20 On wood of deciduous trees, pine and *Arbutus*, known from North America *C. minima* ★[▼]

Capronia minima (Ellis & Everh.) M.E. Barr, *Mycotaxon*, 41(2): 429 (1991)

Basionym: *Teichospora minima* Ellis & Everh., *Proceedings of the Academy of Natural Sciences of Philadelphia*, 47: 419 (1895)

- ≡ *Strickeria minima* (Ellis & Everh.) Kuntze, *Revisio Generum Plantarum*, 3: 534 (1898) (as “*Strickera*”)
 ≡ *Berlesiella minima* (Ellis & Everh.) M.E. Barr, *Memoirs of the New York Botanical Garden*, 62: 71 (1990)
 Bibl.: ELLIS & EVERHART (1895: 419), BARR (1990: 71)
 Ill.: BARR (1990: fig. 9, e–g)
- 20*** On wood of *Juniperus communis*, known from Europe *C. holmiorum* ★
 ≡ *Capronia collapsa* (K. & L. Holm) O.E. Erikss., *The non-lichenized pyrenomycetes of Sweden*: 7 (1992), *nom. illeg.*
 Note: The name *C. holmiorum* is proposed as a *nom. nov.* in part “Taxonomy”. Bibl. and Ill. are given there.
- 21** (18*) Asci 70.5–103 × 15.5–17.2 μm, on wood of *Fagus sylvatica* *C. perpusilla* (°)★
Capronia perpusilla Réblová, *Czech Mycology*, 49(2): 78 (1996)
 Bibl.: RÉBLOVÁ (1996: 78 f.)
 Ill.: RÉBLOVÁ (1996: fig. 1, a–e)
- 21*** Asci 50–70 × 15–23 μm, on wood of *Rhododendron ferrugineum* *C. vaga* ° ☆
Capronia vaga (Rehm) Friebe, *Ascomycete.org*, 3(2): 38 (2011)
 For synonyms see FRIEBES (2011).
 Bibl.: REHM (1882: 120), WINTER (1887: 284, no. 3206), REMLER (1980: 90 f.)
 Ill.: BERLESE (1900: fig. XCIV 2), REMLER (1980: Taf. II, Abb. 5)
- 22** (12*) Ascospores strongly muriform, with irregular septa except for the usually well developed transverse middle septum, dark brown when mature *C. muriformis* ° ● ★
Capronia muriformis Friebe, *Ascomycete.org*, 3(2): 35 (2011)
 Bibl.: FRIEBES (2011: 35 f.)
 Ill.: Friebe (2011: fig. 1, a–m; fig. 2, a–e; fig. 3, a–c)
 Note: *C. acutisetata* Samuels has a similar ascospore septation according to the figure in MÜLLER *et al.* (1987: fig. 5 A) but the original description is not in accordance of this figure. For further information see FRIEBES (*loc. cit.*).
- 22*** Ascospores different 23
- 23** Ascomata immersed in apothecia of *Rhytidhysteron rufulum*, glabrous 24
- 23*** Ascomata not immersed in apothecia of *Rhytidhysteron rufulum* 25
- 24** Asci 44–52 × 6–10 μm, ascospores 12–16 × 4–8 μm *C. castlerockii* ● ▼
Capronia castlerockii (Subhedra & V.G. Rao) Friebe, *Ascomycete.org*, 3(2): 38 (2011)
 Basionym: *Berlesiella castlerockii* Subhedra & V.G. Rao, *Current Science*, 46(24): 868 (1977) (as “*castle-rockii*”)
 Bibl.: SUBHEDRA & RAO (1977: 868), PANDE (2008: 24)
 Ill.: SUBHEDRA & RAO (1977: fig. 1, a–e), PANDE (2008: pl. IV, fig. 5)
- 24*** Asci 78–96 × 10–22 μm, ascospores 18–25 × 8–11 μm *C. glabra* ★ ▼
Capronia glabra W.H. Hsieh, Chi Y. Chen & Sivan., *Mycological Research*, 101(8): 899 (1997)
 Bibl.: HSIEH *et al.* (1997: 899 f.)
 Ill.: HSIEH *et al.* (1997: fig. 6–10)
- 25** (23*) On leaves of *Potentilla cinerea*, ascospores 14–17 × 8–10 μm *C. potentillae* ● ✂
Capronia potentillae (E. Müll.) E. Müll., Petrini, P.J. Fisher, Samuels & Rossman, *Transactions of the British Mycological Society*, 88(1): 73 (1987)
 Basionym: *Dictyotrichiella potentillae* E. Müll., *Sydowia*, 18: 98 (1965)
 Bibl.: MÜLLER (1965: 98)
 Ill.: MÜLLER (1965: Abb. 6, fig. c), MÜLLER *et al.* (1987: fig. 5 B)
- 25*** Substrate different and/or ascospores longer 26
- 26** Ascospores up to 32(45) μm long *C. arctica* ● ★
Capronia arctica M.E. Barr, *Mycotaxon*, 41(2): 424 (1991)
 Bibl.: BARR (1991: 424)
 Ill.: BARR (1991: fig. 4)
- 26*** Ascospores up to 27 μm or shorter 27
- 27** Apical segments of the ascospores subhyaline, lighter coloured than the rest of the ascospore *C. juniperina* ★
Capronia juniperina (K. Holm & L. Holm) O.E. Erikss., *The non-lichenized pyrenomycetes of Sweden*: 7 (1992)
 Basionym: *Teichospora juniperina* K. Holm & L. Holm, *Symbolae Botanicae Upsalienses*, 21(3): 40 (1977)
 Bibl.: HOLM & HOLM (1977: 40), SIERRA LÓPEZ (2006: 74 f.)
 Ill.: HOLM & HOLM (1977: fig. 5 f, 14 f), SIERRA LÓPEZ (2006: lám. 1 b)
- 27*** Ascospores uniformly coloured 28
- 28** Ascospores up to 27 μm long 29
- 28*** Ascospores up to 23.5 μm long or shorter 31
- 29** Asci 33–45 μm long *C. mansonii* (°) □
Capronia mansonii (Schol-Schwarz) E.Müll., Petrini, P.J. Fisher, Samuels & Rossman, *Transactions of the British Mycological Society*, 88(1): 73 (1987)
 Basionym: *Dictyotrichiella mansonii* Schol-Schwarz, *Antonie van Leeuwenhoek*, 34(2): 122 (1968)
 ≡ *Berlesiella mansonii* (Schol-Schwarz) Lar.N. Vassiljeva, Nizshie Rasteniya, *Griby i Mokhoobraznye Dalnego Vostoka Rossii*, 4: 329 (1998)
 Notes: For illustrations see the references given by UNTEREINER (1995). Most of these references also include descriptions of this species.
 Doubtful illustrations because of present pseudoparaphyses are also given in MARINOWITZ *et al.* (2008).
- 29*** Asci up to 84–88(90) μm long 30
- 30** Asci (3)8-spored, setae (12)25–45 μm long *C. acutisetata* ° ★
Capronia acutisetata Samuels, *Transactions of the British Mycological Society*, 88(1): 63 (1987)
 ≡ *Berlesiella acutisetata* (Samuels) Lar.N. Vassiljeva, Nizshie Rasteniya, *Griby i Mokhoobraznye Dalnego Vostoka Rossii*, 4: 329 (1998)
 Bibl.: MÜLLER *et al.* (1987: 63 f.)
 Ill.: MÜLLER *et al.* (1987: fig. 5 A)
 Note: See the note under *C. muriformis*.
- 30*** Asci 8-spored, setae 26–120 μm long *C. epimyces* (°) ▼
Capronia epimyces M.E. Barr, *Mycotaxon*, 41(2): 428 (1991)
 Bibl.: BARR (1991: 428 f.)
 Ill.: For illustrations see the references given by UNTEREINER (1995).
- 31** (28*) Ascomata only with protruding cells or with short, thin walled, frequently septate, obtuse setae 32
- 31*** Ascomata with elongate, thick walled, infrequently septate or aseptate setae 33
- 32** Ascomata only with protruding cells, on *Dryas* *C. dryadis* ● ✂
Capronia dryadis M.E. Barr, *Mycotaxon*, 41(2): 428 (1991)
 Bibl.: BARR (1991: 428)
 Ill.: BARR (1991: fig. 15–16)
- 32*** Ascomata with short, thin walled, frequently septate, bent, obtuse setae, on the pore-surface of *Hapalopilus rutilans* *C. dactylotricha* ● ▼
Capronia dactylotricha Untereiner, Candoussau & Samuels, *Antonie van Leeuwenhoek*, 68(1): 5 (1995)
 Bibl.: UNTEREINER (1995: 5 f.)
 Ill.: UNTEREINER (1995: fig. 1–8, 19–20)

- 33** (31*) Asci up to 75(80) μm long (however only up to 52.5 μm long according to RĚBLOVÁ & SVRČEK, 1997), ascospores 80–220 μm diam. *C. chlorospora* °★
Capronia chlorospora (Ellis & Everh.) M.E. Barr, *Mycotaxon*, 41(2): 426 (1991)
 For synonyms see BARR (1991) or RĚBLOVÁ & SVRČEK (1997)
 Bibl.: ELLIS & EVERHART (1892: 219 f.), BERLESE (1900: 65), STRASSER (1915: 94), BARR (1991: 426), RĚBLOVÁ & SVRČEK (1997: 213)
 Ill.: BARR (1991: fig. 7–8), RĚBLOVÁ & SVRČEK (1997: fig. 2 h–j, 6–9)
- 33*** Asci shorter than 55 μm , diam. of the ascospores less than 140 μm 34
- 34** Ascospores (4)4.5–5 μm broad.. *C. kleinmondensis* ●★
Capronia kleinmondensis Marinowitz, M.J. Wingf. & Crous, *Micromycetozoa occurring on the Proteaceae in the fynbos*: 29 (2008)
 Bibl.: MARINCOWITZ *et al.* (2008: 29)
 Ill.: MARINCOWITZ *et al.* (2008: fig. 13, A–G)
- 34*** Ascospores broader than 5 μm 35
- 35** Ascospores with 4–5 transverse septa, isolated from wood of *Populus tremuloides* *C. munkii* (°)□
Capronia munkii Untereiner, *Antonie van Leeuwenhoek*, 68(1): 9 (1995)
 Bibl.: UNTEREINER (1995: 9 f.)
 Ill.: UNTEREINER (1995: fig. 9–14, 24)
- 35*** Ascospores with 7–9 transverse septa, on *Leucadendron* *C. leucadendri* ●★
Capronia leucadendri Marinowitz, M.J. Wingf. & Crous, *Micromycetozoa occurring on the Proteaceae in the fynbos*: 29 (2008)
 Bibl.: MARINCOWITZ *et al.* (2008: 29 f.)
 Ill.: MARINCOWITZ *et al.* (2008: fig. 13, H–P)
- 36** (11*) Ascospores only with 1 transverse septum 37
- 36*** Ascospores with more than 1 transverse septum ... 38
- 37** Ascospores 15–25 \times 5–8 μm , rough, ascospores usually hyaline to blue, marine *C. ciliomaris* ★
Capronia ciliomaris (Kohlm.) E. Müll., Petrini, P.J. Fisher, Samuels & Rossman, *Transactions of the British Mycological Society*, 88(1): 73 (1987)
 Basionym: *Herpotrichiella ciliomaris* Kohlm., *Nova Hedwigia*, 2: 313 (1960)
 Bibl.: KOHLMAYER (1960: 313 f.), MÜLLER & ARX (1962: 312), AU *et al.* (1999: 326 ff.), JONES *et al.* (2009: 59 f.)
 Ill.: KOHLMAYER (1960: tab. 54, fig. 23–25; tab. 55, fig. 27–29; tab. 56, fig. 30–31), AU *et al.* (1999: fig. 1–4, 5–8, 9–12, 13–17, 18–22)
- 37*** Ascospores 7–8 \times 3–3.5 μm (see notes), smooth, ascospores dark *C. inconspicua* °★
Capronia inconspicua (Munk) E. Müll., Petrini, P.J. Fisher, Samuels & Rossman, *Transactions of the British Mycological Society*, 88(1): 73 (1987)
 Basionym: *Didymotrichiella inconspicua* Munk, *Dansk Botanisk Arkiv*, 15(2): 132 (1953)
 = *Herpotrichiella inconspicua* (Munk) E. Müll., *Beiträge zur Kryptogamenflora der Schweiz*, 11(2): 312 (1962)
 Bibl.: MUNK (1953a: 132), MUNK (1957: 439), MÜLLER & ARX (1962: 312)
 Ill.: MUNK (1953b: fig. 2 a), MUNK (1957: fig. 181 a)
 Note: BARAL (pers. comm.) examined a collection with bigger ascospores (8–10.5 \times 3.7–4 μm)
- 38** (36*) Ascospores often with more than 3 transversal septa 39
- 38*** Ascospores always with 3(4) transversal septa 44
- 39** Ascospores up to 15.5(19) μm long and 3.5(4) μm broad *C. villosa* ●★
Capronia villosa Samuels, *Transactions of the British Mycological Society*, 88(1): 70 (1987)
- Bibl.: MÜLLER *et al.* (1987: 70 f.)
 Ill.: MÜLLER *et al.* (1987: fig. 4 G)
- 39*** Ascospores bigger 40
- 40** Ascospores up to 22(25) μm long 41
- 40*** Ascospores up to 27.5 or longer 43
- 41** Graminicolous (on *Carex*), ends of ascospores obtuse *C. hafellneri* ●◆
Capronia hafellneri Nogrased, *Bibliotheca Mycologica*, 133: 102 (1990)
 Bibl.: NOGRASEK (1990: 102)
 Ill.: NOGRASEK (1990: Abb. 33)
- 41*** Not graminicolous, ascospores fusoid 42
- 42** Ascospores 3–5.5 μm broad *C. fusispora* (°)◇★?
Capronia fusispora (M.E. Barr) E. Müll., Petrini, P.J. Fisher, Samuels & Rossman, *Transactions of the British Mycological Society*, 88(1): 73 (1987)
 Basionym: *Herpotrichiella fusispora* M.E. Barr, *Contributions de l'Institut Botanique de l'Université de Montréal*, 73: 28 (1959)
 Bibl.: BARR (1959: 28)
 Ill.: BARR (1959: fig. 39–41)
 Notes: A collection described as *C. borealis* by RĚBLOVÁ & SVRČEK (1997) resembles *C. fusispora* in ascospores length but the wide asci and the ascospores covered with protruding cells are in better accordance with *C. borealis*. See also the notes under *C. borealis* (43*).
- C. fungicola* ●▼ resembles *C. fusispora* but differs in 5–7-septate ascospores (compared to 1–5-septate ascospores in *C. fusispora*) and different substrate (*C. fusispora* is known from ericaceous plants and possibly also from wood of deciduous trees (a doubtful collection examined by the author), *C. fungicola* is known from ascospores of *Trematosphaeria*).
Capronia fungicola (Samuels & E. Müll.) Unter., *Mycologia*, 86(2): 294 (1994)
 Basionym: *Berlesia fungicola* Samuels & Müller, *Sydowia*, 31: 154 (1979)
 Bibl.: SAMUELS & MÜLLER (1979: 154 f.)
 Ill.: SAMUELS & MÜLLER (1979: fig. 4, A–F)
 Note: MÜLLER *et al.* (1987) mention “*C. fungicola*” in their key but neither declare it as a new combination nor give a basionym.
- 42*** Ascospores 5.5–6.5(8) μm broad *C. montana* (°)★
Capronia montana M.E. Barr, *Mycotaxon*, 41(2): 430 (1991)
 Bibl.: BARR (1991: 430), MÉNDEZ-MAYBOCA *et al.* (2010: 20)
 Ill.: BARR (1991: fig. 21–22), MÉNDEZ-MAYBOCA *et al.* (2010: fig. 1–2)
- 43** (40*) Ascospores up to 39(42) μm long *C. obesispora* ●★
Capronia obesispora RĚBLOVÁ, *Sydowia*, 50(2): 234 (1998)
 Bibl.: RĚBLOVÁ (1998: 234)
 Ill.: RĚBLOVÁ (1998: fig. 1–4, 9 a–c)
- 43*** Ascospores (10)15–27.5 μm long *C. borealis* °◇★
Capronia borealis M.E. Barr, *Mycotaxon*, 41(2): 424 (1991)
 Bibl.: BARR (1991: 424 f.), RĚBLOVÁ & SVRČEK (1997: 211)
 Ill.: BARR (1991: fig. 5–6), RĚBLOVÁ & SVRČEK (1997: fig. 2 g, 4–5), BARR & HUENDORF (2001: fig. 39–42)
 Notes: BARR (1972) mentions two collections of *C. fusispora* on *Cassiope* with 5–7 septate ascospores measuring 22–33 \times 4.5–5.5 μm . According to BARR (1991), these two collections are separable from *C. fusispora* and she describes them as *C. borealis*. However, the ascospores are given as (10)15–27.5 \times (3.5)4.5–6 μm in the protologue, thus considerably shorter than mentioned by BARR in 1972. See also the notes under *C. fusispora* (42).
C. brabeji ●★ is described from twig litter of *Brabejum stellatifolium* and possesses slender ascospores. It is doubtful, however, that this species belongs to *Capronia* since

pseudoparaphyses are mentioned and illustrated in the protologue.

Capronia brabeji Marinowitz, M.J. Wingf. & Crous, *Microfungi occurring on the Proteaceae in the fynbos*: 28 (2008)

Bibl.: MARINCOWITZ *et al.* (2008: 28)

Ill.: MARINCOWITZ *et al.* (2008: fig. 12)

44 (38*) Growing on other fungi..... 45

Note: Lignicolous *Capronia* species are often closely accompanied by other fungi and in some cases it is difficult to decide whether the species are rather lignicolous or fungicolous. In doubtful cases, one should try both possibilities (45 and 48).

44* Substrate different 48

45 Growing on the hymenium of Basidiomycota..... 46

45* Growing on Pyrenomycetes *s.l.* 47

46 Ascospores (10)13–15.5 × 3.5–4.5 µm

..... *C. spinifera* ° ▼

Capronia spinifera (Ellis & Everh.) E. Müll., Petrini, P.J. Fisher, Samuels & Rossman, *Transactions of the British Mycological Society*, 88(1): 69 (1987)

For synonyms see MÜLLER *et al.* (1987).

Bibl.: BIGELOW & BARR (1963: 300 f.)

Ill.: BIGELOW & BARR (1963: fig. 1–3), (?)MÜLLER *et al.* (1987: fig. 4 L) (see notes under the next species), CANNON & KIRK (2007: p. 159)

46* Ascospores 10–14 × 3–4 µm *C. porothenia* ° ▼

Capronia porothenia (Berk. & M.A. Curtis) M.E. Barr, *Mycotaxon*, 41(2): 432 (1991)

For synonyms see BARR (1976).

Bibl.: BARR (1976: 57 f.), LÆSSØE (1995: 32)

Ill.: BARR (1976: fig. 5–7), BARR (1987: pl. 10 B, F), LÆSSØE (1995: 32)

Note: *C. spinifera* and *C. porothenia* seem to be very closely related if not identical as mentioned by MÜLLER *et al.* (1987). LÆSSØE (1995) suggests that the record of *C. spinifera* mentioned by MÜLLER *et al.* (*op. cit.*) represents *C. porothenia*. The size of the ascospores given in their key, however, could in fact resemble both species.

47 (45*) Ascospores tapering, with acute ends

..... *C. parasitica* ° ▼

Capronia parasitica (Ellis & Everh.) E. Müll., Petrini, P.J. Fisher, Samuels & Rossman, *Transactions of the British Mycological Society*, 88(1): 67 (1987)

For synonyms see MÜLLER *et al.* (1987).

Bibl.: ELLIS & EVERHART (1890: 240), BARR (1972: 615)

Ill.: BARR (1972: fig. 148–150), BARR (1987: pl. 10 G), MÜLLER *et al.* (1987: fig. 1 A, 4 F)

47* Ascospores obovoid, with obtuse ends

..... *C. commonsii* ▼

Capronia commonsii (Ellis & Everh.) M.E. Barr, *Mycotaxon*, 41(2): 424 (1991)

Basionym: *Melanomma commonsii* Ellis & Everh., *Proceedings of the Academy of Natural Sciences of Philadelphia*, 42: 239 (1895)

Bibl.: ELLIS & EVERHART (1895: 239 f.)

Ill.: BERLESE (1894: tab. XIX 4), BARR (1991: fig. 12–14)

Notes: In their original description ELLIS & EVERHART (1895) mention “abundant filiform paraphyses”. BARR (1991), who studied at least one collection of *C. commonsii*, does not mention any paraphyses-like elements but, on the other hand, gives no full description of this species. As pointed out by UNTEREINER (2000), germinating ascospores or the remnants of discharged asci of *Capronia* species might resemble pseudoparaphyses. Thus, and since interascal hyphae are lacking in the genus *Capronia*, *C. commonsii* either does not possess (pseudo)paraphyses despite the original description or might not be true *Capronia*.

48 (44*) Ascospores (7)8–10(11) × 3–4 µm

..... *C. proteae* ● ★

Capronia proteae Marinowitz, M.J. Wingf. & Crous, *Microfungi occurring on the Proteaceae in the fynbos*: 32 (2008)

Bibl.: MARINCOWITZ *et al.* (2008: 32)

Ill.: MARINCOWITZ *et al.* (2008: fig. 14, H–L)

48* Ascospores bigger 49

49 Known from leaves and stalks of *Saxifraga oppositifolia*, ascospores 15–21 × 3.5–5 µm *C. setosa* ● ✠

Capronia setosa (M.E. Barr) E. Müll., Petrini, P.J. Fisher, Samuels & Rossman, *Transactions of the British Mycological Society*, 88(1): 67 (1987)

Basionym: *Herpotrichiella setosa* M.E. Barr, *Contributions de l'Institut Botanique de l'Université de Montréal*, 73: 30 (1959)

Bibl.: BARR (1959: 30)

Ill.: BARR (1959: fig. 44–47)

49* Lignicolous (typically; several possibly closely related species on other substrates are mentioned underneath), ascospores shorter *C. pilosella* ° ★

Capronia pilosella (P. Karst.) E. Müll., Petrini, P.J. Fisher, Samuels & Rossman, *Transactions of the British Mycological Society*, 88(1): 67 (1987)

For synonyms see UNTEREINER (1997).

Bibl.: MUNK (1957: 438 f.), BARR (1972: 615 f.), DENNIS (1981: Add. 32 f.), SPOONER (1981: 269 ff.), LARIOS *et al.* (1988: 94 f.), ELLIS & ELLIS (1997: 29), UNTEREINER (1997: 124 ff.), SIERRA LÓPEZ (2006: 75 f.)

Ill.: BERLESE (1894: tab. XXVI 3), MUNK (1957: fig. 182), SPOONER (1981: fig. 6), DENNIS (1981: fig. 35 V), LARIOS *et al.* (1988: fig. 1, H–J), ELLIS & ELLIS (1997: fig. 107), UNTEREINER (1997: fig. 14–26), SIERRA LÓPEZ (2006: fig. 1)

Notes: *C. moravica* (Petr.) E. Müll., Petrini, P.J. Fisher, Samuels & Rossman is considered a synonym of *C. pilosella* (UNTEREINER, 1997).

For illustrations of *C. moravica* see the references given by UNTEREINER (1995).

C. pilosella var. *longisetata* was described by NOGRASEK (1990) with longer setae (50–100 µm) and longer ascospores and asci. A collection mentioned by HOLM & HOLM (1977) with 15–75 µm long setae might resemble *C. pilosella* var. *longisetata* but the size of the ascospores is in the normal range of *C. pilosella* var. *pilosella*.

Capronia pilosella var. *longisetata* Nograsek, *Bibliotheca Mycologica*, 133: 104 (1990)

Bibl.: NOGRASEK (1990: 104)

Ill.: NOGRASEK (1990: Abb. 34)

BERLESE (1894) gives descriptions of several *Chaetomastia* species which show some resemblance to *C. pilosella*. *Ch. hispidula* (Sacc.) Berl. is said to possess shorter but wider asci and slightly bigger 3-, rarely 5-septate or even muriform ascospores. *Ch. hirtula* (P. Karst.) Berl. is described with 4-(6-) spored asci measuring 90–100 × 12 µm and bigger ascospores (20–22 × 6–7 µm). The ascospore size of *Ch. canescens* (Speg.) Berl. is given as 20–25 × 10 µm and *Ch. juniperina* (P. Karst.) Berl. also possesses bigger ascospores (16–22 × 5–7 µm; with 5 transverse septa) than *C. pilosella*.

C. collapsa ★ ✧ is said to differ from *C. pilosella* in bigger (up to 240(385) µm diameter) and collabent ascomata (MATHIASSEN, 1989, 1993; BARR, 1991). However, in *C. pilosella* the size of the ascomata varies considerably (for example MUNK (1957) gives 80–230 µm diameter while LARIOS *et al.* (1988) give only 100–125 µm diameter). Moreover, BARR (1991) mentions a collection of *C. collapsa* with “small collabent ascomata, 90–100 × 60–70 µm”, so the collapsing ascomata seem to be the only separating characteristic. Thus, ERIKSSON (2009) synonymises *C. collapsa* with *C. pilosella*.

Capronia collapsa (Math.) M.E. Barr, *Mycotaxon*, 41(2): 427 (1991)

Basionym: *Herpotrichiella collapsa* Math., *Sommerfeltia*, 9: 51 (1989)

Bibl.: MATHIASSEN (1989: 51 ff.; 1993: 74 f.), BARR (1991: 427)

Ill.: MATHIASSEN (1989: fig. 37, 39, 41–44; 1993: fig. 23–25, 102 A–F, 104, 113), BARR (1991: fig. 9–11)

Herpotrichiella papuapteridis (described from *Papuapteris linearis*), *H. callunae* (described from *Calluna vulgaris*) and *H. martyniae* (described from *Martynia indica*) seem very close to *C. pilosella* except for their different ecology.

Herpotrichiella papuapteridis Otani, *Bulletin of the National Science Museum, Tokyo*, 14(3): 487 (1971)

Bibl.: KOBAYASI (1971: 487 f.)

Ill.: KOBAYASI (1971: fig. 54 e–h)

Herpotrichiella callunae Richițeanu, *Revue Roumaine de Biologie*, 33(1): 8 (1988)

Bibl.: RICHITSEANU (1988: 8 f.)

Ill.: RICHITSEANU (1988: fig. 1–3)

Herpotrichiella martyniae R. Rao, *Maharashtra Vidnyan Mandir, Patrika*, 7(1-2): 63 (1972)

Bibl.: PANDE (2008: 25)

Notes: Information on this species was taken from the description by PANDE (*loc. cit.*).

The original description of the teleomorphic state of *C. coronata*, described from New Zealand, is nearly identical with *C. pilosella*. It seems likely that these species cannot be distinguished without cultural studies.

Capronia coronata ★ Samuels, *Transactions of the British Mycological Society*, 88(1): 65 (1987)

Bibl.: MÜLLER *et al.* (1987: 65 f.)

Ill.: MÜLLER *et al.* (1987: fig. 2, 4 I)

Shortened key

- Asci 32-spored
C. irregularis (2), *C. polyspora* (3), *C. villosa* (3*)
- Asci 16-spored
 - Ascospores 35–60 µm long
C. apiculata (6), *C. longispora* (6*)
 - Ascospores shorter
C. albimontana (7), *C. sexdecimspora* (8), *C. exigua* (9), *C. juniperi* (10), *C. pleiospora* (10*)
- Asci 8-spored, 1–2(3) cells of the ascospores with a longitudinal septum
 - Ascomata stromatic and on old pyrenomycetes
C. nigerrima (14), *C. episphaeria* (14*)
 - Ascomata not so
C. populicola (15), *C. pulcherrima* (*C. mycophila*) (16), *C. montana* (42*) (*C. borealis* (43*)), *C. semi-immersa* (= *C. svrcekiana*) (19), *C. minima* (20), *C. holmiorum* (20*), *C. perpusilla* (21), *C. vaga* (21*)
- Asci 8-spored, more cells of the ascospores with a longitudinal septum and/or ascospores distinctly muriform
 - Ascomata immersed in apothecia of *Rhytidhysterium rufulum*
C. castlerockii (24), *C. glabra* (24*)
 - Ascomata not so, ascospores up to 27 µm or longer
C. arctica (26), *C. mansonii* (29), *C. acutisetata* (30), *C. epimyces* (30*)
 - Ascospores up to 23.5 µm long or shorter
C. muriformis (22), *C. potentillae* (25), *C. juniperina* (27), *C. dryadis* (32), *C. dactylotricha* (32*), *C. chlo-rospora* (33), *C. kleinmondensis* (34), *C. munkii* (35), *C. leucadendri* (35*)
- Asci 8-spored, ascospores only with transverse septa
 - Ascospores only with 1 transverse septum

C. ciliomaris (37), *C. inconspicua* (37*)

- Ascospores often with more than 3 transversal septa
C. villosa (39), *C. hafellneri* (41), *C. fusispora* (*C. fungicola*) (42), *C. montana* (42*), *C. obesispora* (43), *C. borealis* (*C. brabeji*) (43*)

- Ascospores always with 3(4) septa

growing on other fungi

C. spinifera (46), *C. porothelia* (46*), *C. parasitica* (47), *C. commonsii* (47*)

substrate different

C. proteae (48), *C. setosa* (49), *C. pilosella* (= *C. moravica*), *C. pilosella* var. *longisetata*, *C. collapsa*, *C. coronata* (49*)

Notes on some names published in the genera *Berlesiella*, *Capronia*, *Dictyotrichiella* and *Herpotrichiella*

The genera *Berlesiella* Sacc., *Dictyotrichiella* Munk and *Herpotrichiella* Petrak, amongst others, have been synonymized with *Capronia* by MÜLLER *et al.* (1987). Some of the following names published in these genera, however, do not belong to *Capronia* or are at least of doubtful position.

Berlesiella hispida Morgan: According to the original description (MORGAN, 1903), this species possesses paraphyses (“the paraphyses very slender”) and “at first hyaline, at length yellow-brown” ascospores which have a colour “not different from that in some species of *Cucurbitaria*”. Therefore, this species presumably does not belong to the *Herpotrichiellaceae*.

Berlesiella parasitica (Fabre) Höhn. ≡ *Pachythyrium parasiticum* (Fabre) G. Arnaud ex Spooner & P.M. Kirk

Capronia constricta (Bres.) Berl.: This taxon is hardly known and quite ambiguous. BRESADOLA (1890) described *Metasphaeria constricta* with 8-spored asci measuring 80–100 × 14–16 µm and with ascospores measuring 15–30 × 6–8 µm with 3–7 longitudinal septa plus one transverse septum. BERLESE (1900), who apparently examined Bresadola’s type specimen, moved *M. constricta* to the genus *Capronia* and redescribed this species with 16-spored asci measuring 75–85 × 12–16 µm and with ascospores measuring 16–21 × 8–9 µm with 4 transverse septa and 1–2 cells with a longitudinal septum. The type specimen should be examined once again to clarify whether this species truly belongs to *Capronia*.

Capronia hanliniana U. Braun & Feiler ≡ *Caproventuria hanliniana* (U. Braun & Feiler) U. Braun

Capronia hystrioides Dugan, R.G. Roberts & Hanlin ≡ *Venturia hystrioides* (Dugan, R.G. Roberts & Hanlin) Crous & U. Braun

Capronia longonigra (Norm.) Aguirre: This species was originally described as *Leptorhaphis longonigra* Norm. (NORMAN, 1884) and is said to possess a thallus, big ascomata (300–400 µm diameter) and paraphyses. Therefore, it

seems unlikely that *C. longonigra* is a true *Capronia* (see also the discussion in AGUIRRE-HUDSON, 1991).

Capronia macrotricha: Several internet databases (eg. PESI portal, NBN Gateway, ZipcodeZoo, etc.) list this name as “*Capronia macrotricha* ined.” but the author was not able to find any further information.

Capronia pinicola Petrini & P.J. Fisher = *Tyrannosorus pinicola* (Petrini & P.J. Fisher) Unter. & Malloch

Dictyotrichiella delicatula (Vestergr.) O.E. Erikss.: Not a member of the *Herpotrichiellaceae*. For discussion of the generic placement see, for example, BARR (1997, 1999).

Herpotrichiella indica Pande & Subramon.: The English and the Latin description given in the protologue of *H. indica* (PANDE, 2008) refer to two different species. The English description refers to a species with paraphyses, big ascomata (250–312 µm diameter) and big asci (128–153 × 16–22 µm). Paraphyses are also mentioned in the Latin description, which refers to a species with hyaline, one-septate ascospores and smaller asci (95–115 × 18–25.2 µm). It seems unlikely from the descriptions that either of these species belong to the *Herpotrichiellaceae*.

Herpotrichiella longispora Remler = *Acanthostigma longisporum* (Remler) Réblová & M.E. Barr

Taxonomy

Capronia holmiorum Friebes, *nom. nov.*
MycoBank no. MB800711.

Etymol.: The epithet is given in honor of Kerstin and Lennart Holm who described *Teichospora collapsa* as a type species.

= *Capronia collapsa* (K. Holm & L. Holm) O.E. Erikss., *The non-lichenized pyrenomycetes of Sweden: 7* (1992), *nom. illeg.* (ICBN, Art. 53.1), non *Capronia collapsa* (Math.) M.E. Barr, *Mycotaxon*, 41(2): 427 (1991).

Basionym: *Teichospora collapsa* K. Holm & L. Holm, *Symbologiae Botanicae Upsalienses*, 21(3): 41 (1977).

Bibl.: HOLM & HOLM (1977: 41) (as *Teichospora collapsa*), (?)SIERRA LÓPEZ (2006: 79; as “*Capronia* sp. 1”)

Ill.: HOLM & HOLM (1977: fig. 5 g, 14 e) (as *Teichospora collapsa*), (?)SIERRA LÓPEZ (2006: fig. 2 a; as “*Capronia* sp. 1”)

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