



<https://doi.org/10.11646/bde.40.2.10>

Carl—the accidental nomenclaturalist

JOCHEN HEINRICHS[†], ANDERS HAGBORG^{1*} & LARS SÖDERSTRÖM²

[†]Deceased

¹Gantz Family Collections Center, The Field Museum, 1400 South Lake Shore Drive, Chicago, IL 60605-2496, USA;

ahagborg@fieldmuseum.org

²Department of Biology, Norwegian University of Science and Technology, N-7491 Trondheim, Norway; lars.soderstrom@ntnu.no

*corresponding author

Abstract

Eleven *Plagiochila* species previously regarded as invalid names turns out to be validly published by Helmut Carl ahead of their formal publication by Theodor Herzog. We identify them here and argue that Carl should be credited as the author of these taxa.

Keywords: Helmut Carl, liverworts, nomenclature, *Plagiochila*, Theodor Herzog

In his paper “Die Arttypen und die systematische Gliederung der Gattung *Plagiochila* Dum.” Carl (1931; published in May 1931 according to Stafleu & Cowan 1976) mentions a number of infrageneric and specific names in *Plagiochila*. The paper primarily deals with *Plagiochila* sections. Many new sectional names are introduced here, most of them with valid descriptions of new taxa.

A total of 59 specific names are introduced by Carl in this paper. Some of them are explicitly describing new taxa, but the majority are just referring to them as “Herzog, n. sp.” with a specimen citation or with a reference to a paper not yet published (Herzog 1932a). Most of these taxa were later described and published by Herzog (1932a; for which we don’t know the exact time of publication) and Herzog (1932b; published in Dec. 1932 according to a publishing summary at the end of Hedwigia vol. 72). In most cases Carl cites the same specimen(s) later used as types by Herzog, so it is clear that the same material was used.

Nine of these names are published as new species accompanied by valid descriptions. The rest have traditionally been considered nomina nuda. We have found, however, that Carl sometimes informally describes taxa in passing, sometimes on pages different from the place where the names are formally introduced. We don’t think Carl intended to publish them here, leaving that to Herzog. Below is a list of the taxa we have found that Carl accidentally published. We also cite the places in Herzog where these taxa traditionally have been considered published.

Plagiochila blepharobasis Herzog ex Carl (1931: 59)

On page 59 Carl writes “Eine sehr interessante Pflanze ist *P. blepharobasis*, die an dem sonst fast ganzrandigen Blatt lediglich in der Nähe der ventralen Insertion eine Anzahl Wimpern besitzt.” This species has traditionally been cited as Herzog (1932b: 216; e.g. by Herzog 1955 and Gradstein & Hekking 1979). Both Carl and Herzog cite *Killip n. 15066*.

Plagiochila densa Herzog ex Carl (1931: 74)

On page 74 Carl writes “Es ist von Interesse, dass hier noch eine deutliche Crista zur Ausbildung kommt, doch steht eine Verwandtschaft z. B. zu *P. oresitropha* wohl ausser Frage. Ausserdem zeigen die leuchtend braune Farbe und die leicht einseitwendige Beblätterung, dass diese Art nichts mit den *Hypnoides* zu tun hat.” This species has traditionally been cited as Herzog (1932b: 222; e.g. by Menzel 1984). Both Carl and Herzog cite *Killip n. 24681*.

Plagiochila falcatoserrata Carl (1931: 58; ‘*falcato-serrata*’)

On page 57 Carl writes “Es wäre etwa *P. falcato-serrata* von den *Hypnoides* eine gut vermittelnde Form die bereits die sichelförmige Blattkrümmung von *P. cristata* besitzt.” This species has traditionally been cited as Herzog (1932b: 217; e.g. by Herzog 1955 and Gradstein & Hekking 1979). Both Carl and Herzog cite Colombia, Rio Oretaguaza, *Woronow*. Note that Carl did not refer to Herzog when describing this taxon.

Plagiochila hondurensis Herzog ex Carl (1931: 78)

On page 78 Carl writes “An dieser Pflanze wurden eigenartige Rhizoidaussprossungen an den Wimperenden der Blätter festgestellt, die vielleicht mit einer besonderen Art von vegetativer Vermehrung in Zusammenhang stehen.” This species has traditionally been cited as Herzog (1932b: 204; e.g. by Herzog 1938 and Yano 1989). Both Carl and Herzog cite Costa Rica, *Standley n. 37139* (designated as lectotype by Heinrichs et al. 1999) & *44590*; Honduras, *Standley n. 54564*.

Plagiochila leptodictyon Herzog ex Carl (1931: 78)

On page 76 Carl writes “Abgesehen von der rechteckig-eiförmigen Blattform dieser Art haben alle anderen *Subplanae* schmalen Blattzuschnitt, von den oval-verlängerten Blättern von *P. subplana* angefangen bis zu den linealischen von *P. leptodictyon*.” This species has traditionally been cited as Herzog (1932b: 206; e.g. by Herzog 1938 and Gradstein & Hekking 1979). Both Carl and Herzog cite Costa Rica, *Standley n. 36815*.

Plagiochila linearis Herzog ex Carl (1931: 80)

On page 80 Carl writes “Während bei *P. linearis* nur 2–3 kräftigere Apikalzähne vorhanden sind, haben wir bei den anderen Arten eine grössere Zahl von Zähnen.” It is also figured on page 77 (only a detail). Cited as Herzog n. sp. in herb., and apparently never published by Herzog. This species has traditionally been considered a *nomen nudum* (e.g. by Gradstein & Hekking 1979), but we think it is valid here. Carl cites Colombia, *Killip n. 11293*.

Plagiochila loriloba Herzog ex Carl (1931: 48)

On page 47 Carl writes “Eine weitere Steigerung bedeutet *P. loriloba*, bei der die 3 Zipfel aussergewöhnlich, fast bandartig, verlängert werden, so dass das Blatt bis über die Hälfte zerschlitzt wird.” Published by Herzog as *Plagiochila cuneata* var. *loriloba* (Herzog ex Carl) Herzog (1932b: 232), but apparently never published as a species by him. It had traditionally been considered a *nomen nudum* until published as *Plagiochila loriloba* (Herzog) L.Söderstr. in Söderström et al. (2015: 199). We consider that redundant and think Carl’s taxon is valid. Both Carl and Herzog cite Columbia, *Killip n. 6686a*.

Plagiochila nidulans Herzog ex Carl (1931: 99)

On page 97 Carl writes “Die rundlichen Apikalzellen erreichen höchstens 15 x 15 µ und können in der Grösse bis auf 9 oder 10 µ heruntergehen. Sie sind dickwandig und lassen in den Ecken Verdickungen nur undeutlich erkennen (Ausn. *P. nidulans*).” We think Carl intended this as a sectional diagnosis and separated *P. nidulans* from the rest of the section saying that the last sentence does not apply to it. This species has traditionally been cited as Herzog (1932a: 73; e.g. by Tan & Engel 1986). Carl refers to “Ann. Bryol. Bd. V. 1932” where Herzog (1932a) would eventually be published. Both Carl and Herzog cite *Burgeff n. 8015*.

Plagiochila paucispinula Herzog ex Carl (1931: 64)

On page 63 Carl writes “Nur bei *P. paucispinula* ist die Randgliederung wesentlich verarmt, und die Dornen stehen entfernt.” This species has traditionally been cited as Herzog (1932b: 203; e.g. by Herzog 1955). Both Carl and Herzog cite Columbia, *Killip no. 19941*.

Plagiochila trilaciniata Herzog ex Carl (1931: 70)

On page 44 Carl writes “Blätter ventral asymmetrisch ausgebaucht, öfters ampliat, gewöhnlich schwach sichelig herabgekrümmt, nur bei einer Art in Lacinien auslaufend (*P. trilaciniata*), sonst nur gezähnt, mitunter sehr gering.” Cited as Herzog n. sp. in herb. Published by Herzog as *Plagiochila funkiana* var. *trilaciniata* (Herzog ex Carl) Herzog (1932b: 238), but apparently never published as a species by him. This species has traditionally been considered a *nomen nudum*, but we think it is valid here and therefore becomes the basionym for var. *trilaciniata*. Carl and Herzog (1938:14; referring to var. *trilaciniata*) both cite Costa Rica, *Standley n. 38470*, which supports the assertion that var. *trilaciniata* should be treated as a combination.

Plagiochila turgida Herzog ex Carl (1931: 63)

On page 63 Carl writes “Als morphologische Besonderheit sind hier accessorische Perianthflügel zu erwähnen, die jedoch nicht immer angetroffen werden.” This species has traditionally been cited as Herzog (1932b: 196; e.g. Herzog 1938 and Gradstein & Hekking 1979). Both Carl and Herzog cite Costa Rica, *Standley n. 33935*.

Acknowledgements

Jochen Heinrichs initiated this paper when he still was with us and we are now using this opportunity to remember him. We thank Robbert Gradstein for bringing the *Plagiochila loriloba* case to our attention causing us to start the investigation. We also thank Fred Barrie, John Engel and Gary Merrill for helpful comments in their review.

Literature

- Carl, H. (1931) Die Arttypen und die systematische Gliederung der Gattung *Plagiochila* Dum. *Annales Bryologici, suppl.* 2: 1–170.
- Gradstein, S.R. & Hekking, W.H.A. (1979) Studies on Colombian cryptogams. IV. A catalogue of the Hepaticae of Colombia. *Journal of the Hattori Botanical Laboratory* 45: 93–144.
- Heinrichs, J., Renker, C. & Gradstein, S.R. (1999) A taxonomic revision of *Plagiochila subplana* Lindenb., a widespread liverwort of tropical America. *Haussknechtia, Beiheft* 9: 171–181.
- Herzog, T. (1932a) Neue und bemerkenswerte Bryophyten, von H. Burgeff 1927/28 auf Java und den Philippinen gesammelt. *Annales Bryologici* 5: 69–82.
- Herzog, T. (1932b) Beiträge zur Kenntnis der Gattung *Plagiochila* 1. Neotropische Arten. *Hedwigia* 72 (6): 195–242.
- Herzog, T. (1938) Hepaticae standleyanae costaricensis et hondurensis [Pars I]. *Revue Bryologique et Lichénologique* 11 (1): 5–30.
- Herzog, T. (1955) Hepaticae aus Columbia und Peru. *Feddes Repertorium Specierum Novarum Regni Vegetabilis* 57 (1/2): 156–203.
<https://doi.org/10.1002/fedr.4880570105>
- Menzel, M. (1984) Katalog der Lebermoose von Peru. *Willdenowia* 14: 473–523.
- Söderström, L., Pócs, T., Váña, J. & Hagborg, A. (2015) Notes on Early Land Plants Today. 74. Validation of a few names in liverworts (Marchantiophyta). *Phytotaxa* 220 (2): 199–200.
<https://doi.org/10.11646/phytotaxa.220.2.5>
- Stafleu, F.A. & Cowan, R.S. (1976) Taxonomic literature, vol. I: A-G, ed. 2. *Regnum Vegetabile* 94: 1–1136.
- Tan, B.C. & Engel, J.J. (1986) An annotated checklist of Philippine Hepaticae. *Journal of the Hattori Botanical Laboratory* 60: 283–355.
- Yano, O. (1989) An additional checklist of Brazilian bryophytes. *Journal of the Hattori Botanical Laboratory* 66: 371–434.