

Erysimum ochroleucum (Haller fil. ex Schleich.) DC. (Cruciferae), correct name for *Erysimum humile* Pers., nom. illeg., and the *E. duriaei* group classification

by

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Abstract

Cheiranthus ochroleucus Haller fil. ex Schleich., basionym of the combination *E. ochroleucum* (Haller fil. ex Schleich.) DC., is a valid priority name over *Erysimum humile* Pers. It is not possible to differentiate morphologically *E. ochroleucum* from *E. duriaei* Boiss., s.l., and consequently the later and close related taxa are included in the former. The new combinations *E. ochroleucum* subsp. *duriaei* (Boiss.) G. López & Muñoz Garm., *E. ochroleucum* subsp. *neumannii* (Polatschek) G. López & Muñoz Garm. and *E. ochroleucum* subsp. *gorbeanum* (Polatschek) G. López & Muñoz Garm. are proposed.

Key words: Cruciferae, *Erysimum*, *E. humile*, *E. ochroleucum*, *E. duriaei* group, nomenclature, taxonomy.

Resumen

Cheiranthus ochroleucus Haller fil. ex Schleich., basiónimo de la combinación *E. ochroleucum* (Haller fil. ex Schleich.) DC., es un nombre válidamente publicado, prioritario sobre *Erysimum humile* Pers. No es posible diferenciar morfológicamente *E. ochroleucum* del grupo de táxones ibéricos relacionados con *E. duriaei* Boiss., que se incluyen por lo tanto en *E. ochroleucum*. Se proponen las nuevas combinaciones *E. ochroleucum* subsp. *duriaei* (Boiss.) G. López & Muñoz Garm., *E. ochroleucum* subsp. *neumannii* (Polatschek) G. López & Muñoz Garm. and *E. ochroleucum* subsp. *gorbeanum* (Polatschek) G. López & Muñoz Garm.

Palabras clave: Cruciferae, *Erysimum*, *E. humile*, *E. ochroleucum*, grupo del *E. duriaei*, nomenclatura, taxonomía.

Erysimum ochroleucum (Haller fil. ex Schleich.) DC.
in Lam. & DC., Fl. Franç. ed. 3, 4: 658. 1805
≡ *Hesperis foliis glabris, linearibus, lanceolatis, obiter dentatis* Haller, Hist. Stirp. Helv. 1: 195-196, n.º 449, tab. 14 fig. inf. dcha. 1768
≡ *Cheiranthus ochroleucus* Haller fil. ex Schleich. in Ann. Bot. (Usteri) 21: 124. 1797 ["Hall."], basionym; Cat. Pl. Helv.: 16. 1800 ["Hall. fil."]
≡ *Erysimum humile* Pers., Syn. Pl. 2: 200. 1806, nom. illeg.

Ind. loc.: «Ad pedem rupium montis Chasseralle Schuh, Chatelain & Gagnebin. In *Pertuis de la bise*, qui alter est aditus emersuris ab area *Creux du Vent*, in montem *Falconarium*» (Swiss Alps, Jura; sec. Haller, Hist. Stirp. Helv. 1: 195. 1768).

Ic.: Haller (1768), tab. 14, fig. inf. dcha., sub "Hes-

peris Leucoji folio serrato Siliqua quadrangula. I.R.H." (Fig. 1).

Contrary to the earlier acceptance by one of the authors (López, 1998: 376), the name *Cheiranthus ochroleucus* Haller fil. ex Schleich. was validly published in the two works here annotated. In his publications, Schleicher included a clear and unequivocal reference to the plant number ("449") in Haller's *Historia stirpium indigenarum Helvetiae inchoata* (1768). That this number corresponds to Haller's book can be deduced from the paragraph introducing a list that contains the plants lacking a number: "Plantae post impressionem Halleri historia stirpium Helvetiae indigenarum, in Helvetia lecta" (Schleicher, 1797: 132). There is a good drawing (Fig. 1) and an Latin description of the plant in

Haller (1768). In Schleicher (1797), the epithet *ochroleucus* is shortened (“ochrol.”), and the name seems to be attributed to Haller the elder, since within the same work there are names followed by just plain “Hall.” whereas some others appear with the notation “Hall. fil.” (for instance, in page 132 “*Crepis setosa* Hall. fil.”). In the 1800 publication, on the contrary, the species epithet is written in full and attributed to “Hall. fil.”. Since the elder Haller had died in 1777, it is reasonable to assume that the son was the real author of the name and the plain 1797 “Hall.” was simply a mistake, later corrected by Schleicher himself in 1800.

As indicated by Greuter & al. (1986: 112) and Kerguélén (2003), although under a wrong basionym, *Erysimum ochroleucum* (Haller fil. ex Schleich.) DC. has priority over *E. humile* Pers. (1806). The later was the accepted name for this species by Ball (1993: 332). However Persoon’s name, published for a doubtful species without a number but accompanied by an asterisk, is illegitimate, because *Cheiranthus ochroleucus* Schleich. was mentioned as a synonym. Finally, De

Candolle’s 1805 combination is legitimate, since its basionym was validly published.

Morphologically it does not seem possible to separate the group of Iberian plants included by Ball (1993) in *E. duriaei* for having “smaller flowers, narrower fruit and smaller seeds” from *E. ochroleucum*. According to (Ball 1993: 332), *E. ochroleucum* has petals ranging from 12 to 20 mm, fruits from 1,5 to 2,3 mm, styles from (2,5)3 to 8 mm and seeds from 3 to 4 mm. The Iberian plants have petals 11-25 mm long, fruits (1,3)1,5-2 mm wide, styles 1-5(6) mm long and seeds (2)2,5-3,5 mm in diameter (cf. Nieto Feliner, 1993: 67-71). Such overlap recommends returning to the traditional classification –in which the Iberian plants were included in *E. ochroleucum*– and to propose the following new combinations.

Erysimum ochroleucum* subsp. *duriaei* (Boiss.) G. López & Muñoz Garm., **comb. nov.*

Erysimum duriaei Boiss., Diagn. Pl. Orient. 3(1): 26. 1854, basionym

Erysimum humile subsp. *duriaei* (Boiss.) G. López in *Anales Jard. Bot. Madrid* 56(2): 376. 1998

Erysimum ochroleucum* subsp. *neumannii* (Polatschek) G. López & Muñoz Garm., **comb. nov.*

Erysimum neumannii Polatschek in Ann. Naturhist. Mus. Wien 82: 346-348. 1979, basionym

Erysimum duriaei subsp. *neumannii* (Polatschek) P.W. Ball in Bot. J. Linn. Soc. 103(3): 207. 1990

Erysimum humile subsp. *neumannii* (Polatschek) G. López in *Anales Jard. Bot. Madrid* 56(2): 377. 1998

Erysimum ochroleucum* subsp. *gorbeanum* (Polatschek) G. López & Muñoz Garm., **comb. nov.*

Erysimum gorbeanum Polatschek in Ann. Naturhist. Mus. Wien 82: 337-339. 1979, basionym

Erysimum duriaei subsp. *gorbeanum* (Polatschek) P.W. Ball in Bot. J. Linn. Soc. 103(3): 207. 1990

Erysimum humile subsp. *gorbeanum* (Polatschek) G. López in *Anales Jard. Bot. Madrid* 56(2): 377. 1998

The other Spanish subspecies have as correct name:

***Erysimum ochroleucum* subsp. *pyrenaicum* Jord. ex Nyman, Consp. Fl. Eur.: 40-41. 1878**

Erysimum pyrenaicum Jord., Diagn. Esp. Nouv. 1: 176-177 (1864), syn. subst., non (L.) Vill., Prosp. Hist. Pl. Dauphiné: 39. 1779

Erysimum decumbens subsp. *pyrenaicum* (Jord. ex Nyman) O. Bolòs & Vigo in Butll. Inst. Catalana Hist. Nat. 38: 75. 1974



Fig. 1. Bottom right drawing in Haller’s tab. 14 (1768).

- Erysimum seipkae* Polatschek in Ann. Naturhist. Mus. Wien 82: 353. 1979
- Erysimum duriaei* subsp. *pyrenaicum* (Jord. ex Nyman) P.W. Ball in Bot. J. Linn. Soc. 103(3): 207. 1990
- Erysimum sylvestre* subsp. *pyrenaicum* (Jord. ex Nyman) O. Bolòs & Vigo, Fl. Països Catalans 2: 78. 1990
- Erysimum humile* subsp. *pyrenaicum* (Jord. ex Nyman) G. López in Anales Jard. Bot. Madrid 56(2): 376. 1998
- Erysimum ochroleucum* subsp. *penyalarense*** (Pau) Rivas Mart. in Anales Inst. Bot. Cavanilles 21(1): 222. 1964
- Erysimum ochroleucum* var. *penyalarense* Pau in Bol. Soc. Ibér. Ci. Nat. 22: 98. 1923, basionym
- Erysimum decumbens* subsp. *penyalarense* (Pau) Rivas Mart. in Publ. Inst. Biol. Aplicada 42: 123. 1967
- Erysimum penyalarense* (Pau) Polatschek in Ann. Naturhist. Mus. Wien 82: 349. 1979

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Received: 30-I-2004
Accepted: 1-III-2004

