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A Nomenclatural and Taxonomic Revision of the Senecio squalidus Group (Asteraceae)

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Abstract: Senecio squalidas (Asteraceae) currently includes nine subspecies distributed in North and Central Europe and in the Mediterranean basin. Within this taxonomic aggregate, many species have been described, but research on their nomenclatural types is incomplete. A complete nomenclatural survey of 19 names belonging to this taxonomically critical group was carried out. Fourteen lectotypes are here designated. The nomenclatural analysis, complemented by field investigations in the type localities of the taxa described in the Central Mediterranean, allowed us to accept 10 species. Accordingly, we proposed here a new name and a new missing combination at a specific level: S. aknowlensis and S. calalyas.

Keywords; endemism; Mediterranean; nomenclature; taxonomy, typification

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1. Introduction

Senecio squalidus L. (Asteraceae) is a species recorded for North and Central Europe and the Mediterranean basin. Currently, nine subspecies are accepted as proposed by [1–3]. After [1], other contributions dealt with the nomenclature of this group [4–6], but many names still lack nomenclatural types.

In the study of this group, Sicily is a focal point because large part of the taxa have been described or reported from this island. For example, at Mount Etna, three taxa are found at different altitudinal belts. As reported by [7,8], Senecio aethnensis Jan ex DC. (=S. squalidus subsp. aethnensis (Jan ex DC.) Greuter) grows on recent lava in the upper belt, and S. siculus All. (=S. squalidus subsp. chrysanthemifolius (Poir.) Greuter) in the basal belt. At intermediate elevations, these two taxa currently hybridize, forming a hybrid swarm. About 300 years ago, seeds of these hybrid populations were brought to England. At the end of the 18th century, after a century of cultivation in botanic gardens, stabilized derivatives of this old hybridization escaped and spread rapidly to many parts of the British Isles [9,10]. Accordingly, a homoploid hybridogenous species originated, different from the parentals but also from the original native hybrid [11–17]. Albeit homoploid hybrid speciation is relatively rare in Asteraceae [18], other examples of speciation due to hybridization are known from Europe, the Mediterranean, and the Americas in other genera of this family (Bidrus, Tragopogou), but also in other lineages, such as Ocusthera (Onagraceae), Scubiosa (Dipsacaceae), and Vitis (Vitaceae) [19–22].

Linnaeus [23] described S. squalidus, the oldest available name in this group, from cultivated plants possibly obtained by seeds received from Oxford [24], and thus this

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