

## A new name and two new combinations in *Leucheria* Lag. (Asteraceae; Nassauvieae)

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### Abstract

Molecular phylogenetic analysis has demonstrated that *Polyachyrus* Lag. species must be reclassified in *Leucheria* Lag. Here, *Polyachyrus cinereus* Ricardi & Weltdt is renamed as *Leucheria duraniorum*, and *Polyachyrus gayi* J.Rémy and *Polyachyrus poeppigii* Kunze ex Less. subsp. *multifidis* (D.Don) Ricardi & Weltdt are recombined in *Leucheria*.

**Keywords:** *Leucheria*; *Polyachyrus*; Nassauvieae; Asteraceae

### 1. Introduction

Hershkovitz [1] published a molecular phylogenetic analysis of species of the flowering plant genus *Leucheria* Lag. and related Nassauvieae (Asteraceae). That analysis demonstrated that the small genus *Polyachyrus* Lag. is phylogenetically nested within *Leucheria*. These generic names were published simultaneously in the same work [2], and neither ever had been considered a synonym of the other, hence neither has inherent priority per the ICN [3]. Hershkovitz thus transferred the species of the smaller genus, *Polyachyrus*, to the much larger one, *Leucheria*. However, Hershkovitz failed to appreciate that *Leucheria cinerea* (Ricardi & Weltdt) Hershk., nom. inval. per Art. 53 of [3] ( $\equiv$  *Polyachyrus cinereus* Ricardi & Weltdt) was a homonym of *L. cinerea* D. Don, which is considered to be a taxonomic synonym of *Leucheria tomentosa* (Less.) Crisci [4]. Hershkovitz also failed to provide a new combinations for *Polyachyrus gayi* J.Rémy and an accepted subspecies of *Leucheria poeppigii* (Kunze ex Less.) Hershk. In this work, *Polyachyrus cinereus* is renamed and *P. gayi* and *P. poeppigii* Kunze ex Less. subsp. *multifidis* (D.Don) Ricardi & Weltdt are recombined in *Leucheria*.

### 2. Methodology

The new botanical names are constructed according to the rules and conventions of the ICN [3].

### 3. Results and discussion

The new names are constructed per ICN rules and conventions [3] as follows:

- ***Leucheria duraniorum*** Hershk., nom. nov. BASIONYM: *Polyachyrus cinereus* Ricardi & Weltdt, Gayana, Bot. ~~no.~~ 26: 26. 1974.
- **Etymology:** The epithet honors the family of Dr. José Elias Durán Lima and his wife, Susana Yolanda Roa Ferreira, without whose support my discovery of the relations of *Polyachyrus* would not have been possible (see also [1]).
- ***Leucheria gayi*** (J.Rémy) Hershk., comb. nov. BASIONYM: *Polyachyrus gayi* J.Rémy, Fl. Chil. [Gay] 3(3): 372. 1848.

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- *Leucheria poeppigii* (Kunze ex Less.) Hershk. subsp. *multifida* (D.Don) Hershk., comb. nov. BASIONYM: *Polyachyrus poeppigii* Kunze ex Less. subsp. *multifidis* (D.Don) Ricardi & Weldt, Gayana Bot. 26: 19. 1974.

The new botanical names are constructed above because Hershkovitz [1] demonstrated that the taxa must be classified in the genus *Leucheria* rather than *Polyachyrus*. No combinations for these taxa had existed in the genus *Leucheria*, hence their renaming was necessary. Without effective publication per [3], the taxa may exist in nature but they do not exist for purposes of scientific communication or legally for purposes of biodiversity administration, or they exist but are incorrectly classified.

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#### 4. Conclusion

Effective publication of botanical names per ICN is essential to science. By effectively publishing here new names for three taxa of *Leucheria*, these names become available for purposes of scientific research.

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#### Compliance with ethical standards

##### *Disclosure of conflict of interest*

The author declares no conflict of interest.

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#### References

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