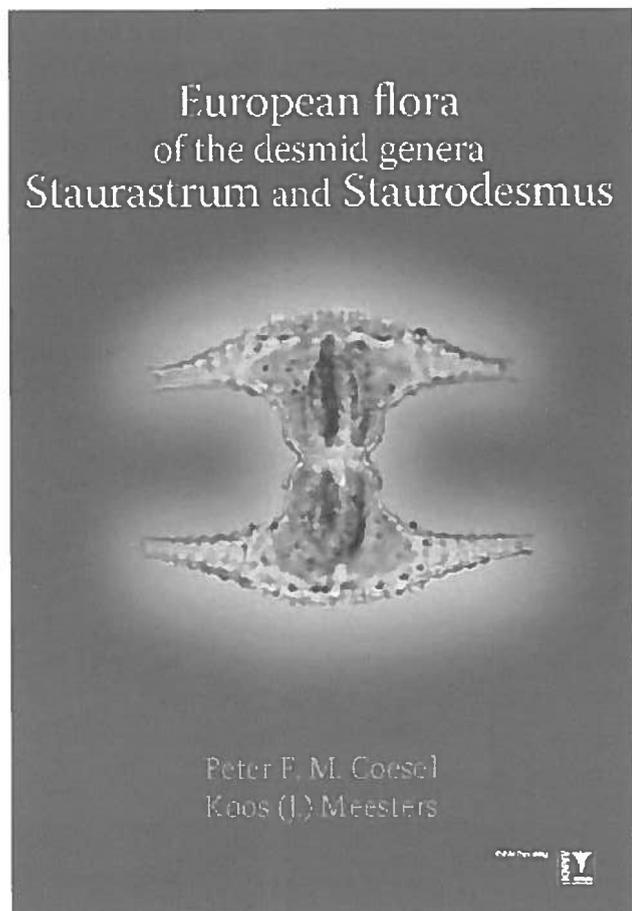


## Book Review

European flora of the desmid genera *Staurastrum* and *Stauroidesmus* (2013)

P.F.M. Coesel and K.J. Meesters. KNNV Publishing, Netherlands. 120 plates (line drawings). 357pp. ISBN: 978-90-5011-458-5. Hardback price €99,95 (approx. £85)



For the amateur enthusiast or the professional phyco-  
logist this hardback print edition of Coesel and Meesters' up-to-date *Staurastrum* and *Stauroidesmus* flora is a valuable printed resource for identifying two of the notoriously polymorphic genera of desmid algae. This book builds upon the previous offering by the authors - *Desmids of the Lowlands: Mesotaeniaceae and Desmidiaceae of the European Lowlands* (2007) - covering approximately three times the number of taxa, within these genera.

Species descriptions are concise with clear reference being made to the original description and the basionym—a new feature in this text. This provides a useful anchor for any reader wanting to trace historic records and interrogate species descriptions further. A dichotomous key is included prior to detailed descriptions for each of the genera. I personally have never found keys very accessible but the ones presented here seem to work well. Descriptions are given alphabetically by species name and cover not only morphology but offer some detail of species ecology and

European distribution. This extra information can be useful when trying to decide between two morphologically similar species. However, some of the ecological descriptions in this version do differ from those presented in 'Desmids of the Lowlands' and it is unclear whether this is due to expanded recent sampling across Europe or a more thorough examination of historical records.

The written descriptions are accompanied by 120 plates of line-drawn illustrations collected from original descriptions, where possible, and re-drawn to present a cohesive style and easier comparison between taxa. Illustrations are drawn to the same scale which gives a good overview of the variation in size within (where multiple individuals are illustrated) and between taxa. Personally I think further illustrations would have been welcome to enhance the descriptions and practical application of the work. For example species distribution maps, habitat photographs and groups of commonly associated taxa, or even some photomicrographs of challenging features would have further enhanced the accessibility of the book.

The preface to the book does highlight the challenges and shortcomings of morphological identification in the age of genetic sequencing. There are worryingly few taxonomists globally working on the Desmidiaceae and with the general decline in the application of traditional taxonomy you wonder whether this will be the final taxonomical work on the desmids to be published, certainly in print. I personally have found the first version of the author's desmid flora invaluable in my studies and a breeze to leaf through and make fast identifications. The additions made in this flora will no doubt make species-level identifications within these difficult genera slightly less painstaking.

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### References

Coesel, P.F.M., and Meesters, K.J., (2007) *Desmids of the Lowlands: Mesotaeniaceae and Desmidiaceae of the European Lowlands*. KNNV Publishing, Netherlands.