



## Introduction: an outlook after the completion of the seventh edition of the *Nouvelle Flore de la Belgique*

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**ABSTRACT.** – Two new editions of the Belgian Flora are published in 2023, namely the 7<sup>th</sup> edition of the *Nouvelle Flore de la Belgique* and the 4<sup>th</sup> edition of the *Flora van België*. This prompts a brief reflection on the future team of authors, the delineation of the territory of the Flora and the challenge of a modularly structured Flora with printed and digital components.

**RÉSUMÉ.** – **Introduction :** Une vue prospective après l'achèvement de la septième édition de la *Nouvelle Flore de la Belgique*. Deux nouvelles éditions de la Flore belge sont publiées en 2023, à savoir la 7<sup>e</sup> édition de la *Nouvelle Flore de la Belgique* et la 4<sup>e</sup> édition de la *Flora van België*. Cela suscite une brève réflexion sur la future équipe d'auteurs, la délimitation du territoire de la Flore et le défi d'une structure modulaire avec des composantes imprimées et numériques.

**SAMENVATTING.** – **Inleiding:** een vooruitblik na de voltooiing van de zevende editie van de *Nouvelle Flore de la Belgique*. In 2023 worden twee nieuwe edities van de Belgische Flora gepubliceerd, namelijk de 7<sup>de</sup> editie van de *Nouvelle Flore de la Belgique* en de 4<sup>de</sup> editie van de *Flora van België*. Dit is aanleiding voor een korte beschouwing over de toekomstige auteursploeg, de afbakening van het gebied van de Flora en de uitdaging van een modulaire opbouw met gedrukte en digitale componenten.

In the course of 2023, two new editions of the Belgian Flora are published: the fourth Dutch edition of *Flora van België* (Verloove & Van Rossum 2023a) and, soon afterwards, the substantively identical seventh French edition of *Nouvelle Flore de la Belgique* (Verloove & Van Rossum 2023b), respectively 25 and 11 years after the publication of the previous editions (Lambinon *et al.* 1998, Lambinon & Verloove 2012). The rewriting of these two Floras was, for multiple reasons, a long and tedious process. Although the initial idea was to write a completely new Flora, by a partially renewed and younger team of authors and collaborators (as proposed by Lambinon *et al.* 2014), due to unforeseen technical reasons and subsequent lack of time, these new editions were eventually prepared in the tradition of and in line with previous editions of the *Nouvelle Flore/Flora van België*. The rewriting process was substantially done by two authors: Fabienne Van Rossum (FVR) and Filip Verloove (FV). The basis for the revision was the sixth French edition of the *Nouvelle Flore* (Lambinon & Verloove 2012; hereafter NF6) because this was the most updated version of the Flora. In a first phase, the classification was adapted to the APG (Angiosperm Phylogeny Group) consensus taxonomy, i.e. a modern, mostly molecular-based system of plant taxonomy. For this purpose, the text of NF6 was cut

up and rearranged by FVR to bring it in line with the APG classification. Subsequently, all chorological, taxonomic and nomenclatural corrections and additions were inserted by FV in the rearranged files of NF6. Finally, the new manuscript (in French) was translated into Dutch by Luc Allemeersch. This resulted in two new, simultaneous and identical versions of the Belgian Flora in two languages. Especially the new Dutch edition, published a quarter of a century after the previous one, has therefore undergone very substantial changes. As compared with NF6, several hundred new illustrations were added (original drawings by Sven Bellanger and Liliane Tytens); an attempt has been made to depict a representative species for almost all genera. Finally, a new, more modern layout was chosen (designed by Sven Bellanger).

This issue of *Dumortiera* is entirely dedicated to the publication of these two new Flora editions and deals with modifications, additions and corrections, as compared with the most recent French edition (NF6: Lambinon & Verloove 2012). The following items are dealt with:

- general introduction and outlook (FV);
- chorological adjustments (FV);
- nomenclatural and taxonomic remarks (FV);
- new nomenclatural combinations (FV & Gabriele GALASSO);

- notes on the new treatment of the genus *Rubus* (Rosaceae) (Hendrik DEVRIESE & Abraham VAN DE BEEK; in Dutch);
- a note on the history and design of the key for identifying trees, shrubs and lianas, mainly according to leaf characteristics, and changes therein in the new Flora edition (Anne RONSE; in Dutch);
- overview of new Dutch vernacular names (FV, Ivan HOSTE, Leni DUISTERMAAT & Baudewijn ODÉ; in Dutch).

With the publication of two new editions of the *Nouvelle Flore/Flora van België* the preparation of a next edition inevitably starts. However, the concerns that were already expressed by Lambinon *et al.* (2014) still apply, if not even more so today than a decade ago. There are many challenges: the team of authors urgently needs to be rejuvenated and expanded, taking into account what a Belgian Flora will look like or needs to look like in the future (see below). Since the publication of a modern, very solid French Flora (Tison & de Foucault 2014; a completely revised version is anticipated in 2025; pers. comm. J.-M. Tison) (a good and up-to-date Flora was missing for several decades in France), the question arises whether or not the *Nouvelle Flore* still needs to cover northern France. Alternatively, perhaps a (renewed) collaboration with the Naturalis Biodiversity Center in the Netherlands and the Luxembourg National Museum of Natural History, in order to compile a Flora that covers the Benelux countries (see also e.g. Siebel & During 2006 or van der Meijden *et al.* 2016), would be more appropriate. Such a cooperation would, however, inevitably raise other problems. Anyway, it is clear that the territory covered by the Flora must be thoroughly reconsidered.

It will also be necessary to consider to what extent a hardcopy of a book is still useful or, better, how a hardcopy could be optimally combined with digital sources. Artificial intelligence and image recognition apps will probably never – at least not in the near future – allow accurate identification of species from critical groups such as grasses or sedges; for such troublesome groups a Flora may always remain indispensable (quite apart from the fact that the satisfaction that comes with successfully identifying a plant after going through a key will always be missing). Yet, young botanists may prefer to identify a plant using a Flora that is also available as a smartphone application, rather than a hardcopy of the same Flora.

More or less in line with this, we should consider how to deal with the exponential increase of garden escapes and other non-native plants. In the new Flora edition, almost 100 additional (nearly exclusively non-native) taxa are treated in full detail as compared with the latest French edition (and several hundred as compared with the latest Dutch edition). However, many more species could have been added, especially ephemeral or only locally naturalized aliens. To prevent the Flora from becoming exces-

sively bulky, it seems advisable to have a core-Flora that includes all native and widely naturalized alien species. Detailed, unlimited information about all other alien species, including identification keys, could then be presented (and permanently kept up-to-date) online. This is actually already happening in Belgium (<https://alienplantsbelgium.myspecies.info/>), but can be further elaborated, also elsewhere in western Europe. Regarding the chorological data, and more specifically the frequency assessments, contemporary (local) databases probably will allow a more precise assessment, based on data rather than on a subjective assessment, as has always been the case in the past in the *Nouvelle Flore*. But here, too, serious problems need to be overcome: some regions that are covered by the Flora will undoubtedly have more complete and/or reliable data than others.

On the occasion of the publication of the sixth French edition of the *Nouvelle Flore*, Lambinon *et al.* (2014) referred to “the end of an era”. The seventh edition shows that this was a somewhat premature thought. There is, however, reason to believe that in the future the Flora of Belgium and the surrounding territories will indeed in all respects look different from previous Floras, including the seventh edition of the *Nouvelle Flore*.

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