BRAZILIAN FLORA *ONLINE* 2020

The Brazilian Flora *Online* 2020 (BFO 2020) project aims to respond to national and international targets signed by the Brazilian government, centering around the consolidation of a national flora (including algae, fungi and plants) in a platform that can be integrated into the model being developed for the *World Flora Online* (WFO). The monographs generated by the FBO 2020 are the responsibility of the researchers and constitute original work, thus any content taken out from other sources should be clearly referenced.

Applications[1]

Who can apply?

- researchers with proven experience in plant and fungal systematics.
- applications can be sent by individuals or as colective proposals, for the latter two or more researchers associate to deliver the monograph of a given group.

How to apply?

During the period between 10th of March and 30th of June 2015, exclusively through the e-mail floradobrasil2020@jbrj.gov.br. An e-mail will be sent confirming the application was received.

How to prepare the application proposal?

1. Proposals should be prepared according to the taxonomic delimitations currently followed by the Lista de Espécies da Flora do Brasil 2015 http://floradobrasil.jbrj.gov.br/ (even in cases when the proponents do not agree with such delimitations and their intention is to alter them subsequently).

2. All native and naturalized species will be included in the Flora do Brasil Online (FBO) 2020. Species found only under cultivation will not be included.

3. For vascular plants and bryophytes, only proposals dealing with families and genera will be accepted. Families with more than 60 species will not be broken into genera.

4. For Algae and Fungi, proposals by Order or Class will be accepted.

5. Proposals by region or by classification subdivisions not dealt with by the Lista de Espécies da Flora do Brasil, such as subgenera or sections, will not be accepted as the system is not able to handle these groupings.

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[1] It is suggested that the researcher should, prior to applying, consult the summary of the model that will be used for the Brazilian Flora *Online* 2020 (BFO 2020).

6. Individual or collective applications have to be **limited to 300 species per researcher[2]**.

7. Six-monthly work timetable will be presented, starting either on the first or second semester of 2016 and ending at maximum at the end of the second semester of 2020. Per semester, a minimum of 10% of the total proposed number of species or 15 species (or the largest of the two numbers) will be delivered. In the case of collective proposals, the timetable has to specify what each researcher has committed to completing.

8. One researcher may be included in different proposals, however he/she needs to be aware of not surpassing his individual limit, as this may cause the failure of the proposal.

9. A researcher who presents a proposal may also inform about his/her interest in monographing other groups. Such manifestations of interest will be used only as a planning tool by the BFO organizing committee.

Target management and authorship

- The proposed timetable has to be strictly followed. Not complying to the targets will lead to the cancellation of the proposal and result in the taxonomic group becoming available for new applicants. The organizing committee will take action regarding deadlines towards the completion of the Brazilian Flora *Online* in 2020.
- The authorship of a taxonomic group for the Brazilian Flora *Online* 2020 will be attributed to a researcher only when the system verifies that all fields are adequately completed, and only all descriptions pertaining a taxonomic group (genus, family or other) are satisfactorily concluded. Such authorship will be guaranteed in the *online* version until 31st December 2020, when a final PDF marking the end of the project will be generated. After this date a new phase will initiate and the organizing committee of the Brazilian Flora *Online* will be able to maintain the authorship(s) for a new period or to make changes. Before submitting the proposal and start working the candidate(s) should consider carefully the fact that part of the data he/they included may be taken over by other author(s) after January 1st 2021. Such is the reality of a flora online that needs to be constantly updated if it is to be useful.
- The person(s) responsible for filling family data in large families with genera monographed by several authors will be decided by the organizing committee of FBO 2020 preferably taking into account the level of participation of each author.

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[2] After finishing their commitment a researcher may apply to monograph other groups. The public page of the Brazilian Flora *Online* 2020 will list groups that have not yet been awarded.

Database

The researchers that contributed to the Lista de Espécies da Flora do Brasil may remember that this list started from the amalgamation of lists from different sources (IPNI, Lista de Espécies do Cerrado, Lista de Espécies da Mata Atlântica, Lista do Acre, etc.). A similar process will take place at the start of the FBO. Names that appear in important reference works (*Flora Brasiliensis*, Catálogo das Plantas do Conesul, Flora de Santa Catarina, etc.) that have not yet been included or evaluated, will also form the initial database, as well as the Lista de Espécies da Flora do Brasil 2015. All names will have to be evaluated and it will not be possible to delete them, even if their identity is doubtful (in this case this information will appear as a formal comment) .

Availability of BFO data

- only concluded monographs will be available to the public.
- Data will e shared following the "Open Data Commons Attribution License (ODC-By) v1.0" (http://opendatacommons.org/licenses/by/summary/), and it will be possible to integrate them to the portal of the Flora do Mundo Online and other systems.

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Summarized model

1. <u>Structure</u>. The system that will house BFO 2020 was built to enable inclusion and consultation of the data considering the heterogeneous state of knowledge of the different taxonomic groups. The present system counts with two ways to include and present the data:

> **a)** *controlled fields*: options of multiple choice containing characters and character states chosen by the authors of each group from a dictionary available within the system. For vascular plants there will be controlled fields up to the category of species and for the remaining groups up to genus.

> **b)** *free text fields*: descriptions of the taxa will be included in a not-controlled way with a large limit for character number.

The system as a whole is being built in three languages (Portuguese, English and Spanish). Each author will be able to select the language for their monography. The controlled fields will be shown in all three languages but the free text fields will be only present in the language chosen by each author for including his/her text.

In cases where the word/botanical term the author wants to use in the controlled field is not available within the dictionary it is recommended that a similar alternative is used. When no alternative is found, the author may propose a new term that, following evaluation, may be included in the dictionary.

2. Rules for the authors (in the case of authors for genera, start from letter 'e')

> a) <u>Family morphologic description</u>. Include a complete description in the free text field available[3].

> b) <u>Choice of controlled fields to distinguish genera</u> (only for families with two or more genera in Brazil). Using the words/botanical terms from the dictionary available in the system, an author will have to select between 5 and 20 characters and their respective character-states to be completed by him/herself when preparing the generic descriptions.

> c) <u>Key for generic identification</u>. It is mandatory to include a key for all genera that occur in Brazil. The author may opt between including a dichotomous key or a multiple entry key or even both. For multiple entry keys the author has to provide a the *link* for

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[3] At the present moment there will not be completion of controlled fields for families but this will be requested from authors later in the project.

the webpage where this key is available once the system does not have tools to develop interactive keys at the moment.

d) Family illustrations. Drawings or photographs that help in the recognition of the family may be included.

e) Generic morphologic description. For families with two or more genera represented in the Brazilian flora a summarized generic description will be automatically generated from the data included in the controlled fields. In this case it is not mandatory but highly recommended to include also a more complete textual generic description that can be added in the free text field for the genus. In the case of families with a single genus it is mandatory to fill the free text field.

f) Choice of controlled fields for species (only for genera of vascular plants with two or more species represented in the Brazilian flora). Using the words/botanical terms available within the system the author will select between 5 and 20 characters (each one with respective character states) to be filled when describing the species.

g) Key for species identification. It is mandatory to include a key for the species that occur in Brasil. The author may opt to include a dichotomic key or a multiple-entry key or even both. For multiple entry keys the author has to provide a the *link* for the webpage where this key is available once the system does not have tools to develop interactive keys at the moment [4].

h) Generic illustrations. It will be possible to include drawings and photographs that illustrate and help to recognize the different genera.

i) Species morphologic descriptions. In the case of genera that have two or more species represented in the Braziian flora, a summarized species description will be automatically generated from the data included in the controlled fields filled for the genera and species. In this case it is not mandatory but highly recommended to include also a more complete textual specific description that can be added in the free text field for the species. In the case of genera with a single species it is mandatory to fill the free text field.

j) Identification key and descriptions for infra-specific categories. There will be no options to include controlled fields for infra-specific categories. Descriptions and keys for those will be added into the appropriate free text fields.

k) Species illustrations. It will be possible to include drawings and photographs that illustrate and help to recognize the different speices. Photographs and illustrations included in the Lista de Espécies da Flora do Brasil 2015 will be automatically imported but the authors will be able to remove them if they so wish.

l) Representative specimen selection from the virtual herbaria. The author(s) will be able to select from the list of material available in the main Brazilian virtual herbaria

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[4] This particular situation may be revised following the develoent of new tools.

the specimens that they recognize as belonging to the taxon they are describing. The group of selected specimens will generate a distribution map and a *voucher* specimen list for the species. The *vouchers* choosen for the Lista de Espécies da Flora do Brasil 2015 will be automatically imported into the species page of the FBO 2020, but the author(s) will be able to modify them. When the *voucher* is not yet available online, the author(s) will be able to include them manually as was done in the Lista de Espécies da Flora do Brasil system.