

Harvard Papers in Botany Manuscript Preparation Guidelines

General Form:

- **Title page:** title, author(s') name(s) and address(es)
- **Abstract:** complete in one paragraph (we accept a second abstract in another language)
- **Keywords:** up to five
- [Text](#)
- [Literature Cited:](#) begin on a new page; [Standardization of nomenclature](#)
- [Figures](#)
- [Figure captions:](#) begin on a new page
- **Images:** see [Figures](#)
- [Tables:](#) each on a separate page
- [Keys](#)
- [Index to Numbered Collections](#)
- [Footnotes](#)
- [Additional resources for authors](#)

General

- The Chicago Manual of Style (18 th edition) is currently being used as a reference for style.
- Manuscripts should be submitted in electronic form.
- Format all pages to 8.5" x 11" (standard U.S. letter-sized paper), double-spaced, with a minimum of 1" margins on all sides.
- Text should be written in either English or Spanish.
- Format text in a standard sans serif font, preferably size 10 font.
- When preparing files in MS-WORD (for Mac or PC):
 - Do not assign "styles" to formatting for titles, subtitles, subheads, block quotes, paragraphs and indents, etc. (i.e., do not use H1, H2, etc.) The default, or "normal," style should be the only style in your manuscript.
 - Use "smart quotes," not "straight quotes."
 - Turn off all formatting in both Preferences and in the Tool menu under AutoCorrect.
 - Make sure that there are no comments, annotations, or hidden text whatsoever in the final version of the manuscript.
 - Do not use the space bar to achieve tabs or indents or to align text.

- First sentences of paragraphs are indented with a tab (0.5", not first line indents).
- All text should be left-aligned --- do not use "justify" --- except headings and sub-headings, which should be centered.
- If using "track changes" in MS-WORD, make sure to accept or reject all changes before submitting the file (i.e., there should be no revision marks, hidden or otherwise, in the final manuscript).
- Insert the last name(s) of the author(s) in a header at the upper-right corner of every page. Insert a footer with the page number in the lower-right corner of every page, number pages consecutively throughout the manuscript, beginning with the title page as page 1 and ending with the last page of the figure captions.
- Double-space all text, including addresses, abstract, tables, figure captions, footnotes, and literature cited.
- Insert one space after periods, colons, question marks, and all other punctuation marks.
- Use two hyphens with no space between them to indicate ranges of numbers, for example, page numbers, 20--23; measurements, 5--7 mm; altitudes, 1500--2500 m.
- A single hyphen is used in hyphenated words, for example, 9-nerved, oval-triangular.
- Do not italicize common Latin words or phrases ("et al.," "i.e.," "in situ," "ca."), and use the abbreviations "e.g." and "i.e." only within parentheses.
- Do not use "&" except with authors of plant or fungal names (i.e., *Sipapoa* Maguire & Boom).
- Citations of plant or fungal names at the rank of genus or below must include the author(s) name(s) the first time they appear in the manuscript, but should not be included in the abstract or title.
- You must include the type collector's initials.
- Authors writing monographs should number species within the manuscript and should include an [Index to the Numbered Collections](#) at the end of their papers.
- Submissions that include a new taxon with any author or authors not included in the authorship of the submitted manuscript are required to submit a letter from such author or authors authorizing the publication of the new taxon.
- For fungi, taxonomic novelties must be registered with [MycoBank](#) and the registration number (beginning with MB or MBT) should be provided on the next line below the taxon name.
- The names of countries cited should be current as far as the author is able to ascertain.
- For holotypes, please give the accession number in brackets after the herbarium acronym (i.e., Holotype: A [12345])

Text

Headings

- Avoid using "Introduction" and "Summary" as headings. Typical first-level headings are "Materials and Methods," "Results," "Discussion," and "Literature Cited."
- Type first-level headings in small-caps and center. (e.g., "Materials and Methods")
- Second-level headings are capitalized headline style, italic, and flush left on a separate line. (e.g., "*Seed Morphology*")
- Third-level headings are capitalized sentence style, roman, and flush left. They are followed by a period and run-in to the text. (e.g., "Modes of speciation. Recent studies have shown...")
- For subheadings within paragraphs (e.g., morphological characteristics), italicize in sentence. (e.g., "*Floral bracts* triangular, acute to obtuse. *Flowers* yellowish to yellowish green.")
- For monographs please follow the format below. In addition, authors should number species and reference these numbers in the [Index to Numbered Collections](#).
- For protologues and species citations, please follow the format in the following example:
 - For new species, combinations, etc.:
 - **Macrocarpaea dies-viridis** J. R. Grant, *sp. nov.* TYPE: ECUADOR. Zamora-Chinchipecordillera del C ndor, 8.8 km E of Paquisha, 03 56'03" S, 078 37'32" W, 1369 m, 27 February 2006, J. R. Grant, M. L. Cheung, F. Luisier & N. Villard 06-4352 (Holotype: NY [12345]; Isotypes: G, LOJA, MO, QCA). Fig. 1.
 - All others:
 - **Pomatocalpa angustifolium** Seidenf., Opera Bot. 95: 110. 1988. TYPE: THAILAND. Krabi: Laem Nang, 16 February 1996, G. Seidenfaden and T. Smitinand GT 6474 (Holotype: C [12345]). Fig. 6.
 - Followed by:
 - Latin (for protologues)
 - Basionym, synonym(s)
 - English description
 - The following subheadings are paragraph-indented, sentence-style caps, boldface, followed by a colon, and run-in to the text:
 - "Etymology" or "Eponymy"
 - "Paratype" (for protologues) or "Additional specimens examined" (for species citations), followed by the country in all caps. Follow the example below:
 - **Paratype:** COSTA RICA. Dept. Magdalena: San Sebasti n, Mar. 1948, R. Romero 887 (US).

- Other subheadings: "Distribution," "Habitat," "Phenology," "Specimens examined," "Conservation status," etc.)
- No boldface for plant organs (see [above](#)).
- Text following subheadings begins with a lower-cased letter.
- Any other text that is not the protologue, basionym, synonym(s) or description.
- For basionym and synonym(s), citations follow the example below (with 0.5" hanging indent):
 - Basionym: *Physurus bidentifer* Schltr., Repert. *sp. nov.* Regni Veg. 16: 328, 1920. TYPE: BRAZIL. Parana: Jaguariahyva, March 1916, *A. Dusen* 18015A (Holotype: S [not seen]).
 - Synonyms: *Erythrodes bidentifera* (Schltr.) Garay, Communic. Inst. Nat. Investig. Cienc. Buen. Aires 1, 6: 7, 1954.
 - *Erythrodes serripetala* Garay, Bot. Mus. Leafl. Harv. Uni. 21: 250, 1967. *syn. nov.* TYPE: without locality or collector (Holotype: W-R 37739 [not seen], photo AMES).
 - *Aspidogyne serripetala* (Garay) Garay, Bradea 2: 204, 1977.

Latin abbreviations

- s. l. or sensu lato (do not set off from species name with commas)
- s. str. or sensu stricto
- *comb. nov.*
- *stat. nov.*
- *sp. nov.*
- *syn. nov.*
- *s.n.*
- *fide*

Main Text

- Cite each figure and table in the text in numerical order. (i.e., Fig. 1 should be cited before Fig. 2, Fig. 2A before Fig. 2B, Table 1 before Table 2, etc.)
- Only cite references included in the Literature Cited section. Please double-check the spellings of authors' names and dates of publication. Check diacritical marks in citations of foreign publications.
- Write out "Figure" only at the beginning of a sentence.

- Use the following standard abbreviations:
sp./spp. (species singular/plural), subsp. (subspecies), subgen. (subgenera), hr (hours), min (minutes), ft (feet), ft-c (foot-candles), diam. (diameter, when used with a value), km (kilometer), m (meter), cm (centimeter), μm (micrometer), dbh (diameter at breast height), alt. (altitude), m.s.n.m. (above sea level [Spanish])
- Use symbols for percentage (%) and micro- (μ). Insert a space before M (molarity) and N (normality).
- Style for latitude and longitude: 03°56'03" S, 078°37'32" W.
- Do not use the degree sign for temperatures. (e.g., "37 C")
- Within parentheses, use a semicolon between types of citations: "(Fig. 4; Table 2)" or "(Jones, 1950; Smith and Doe, 1967, 1968)."
- Use two regular dashes to indicate the en-dash ("1992--1993") and three regular dashes for the em-dash ("Seed Anatomy---Part III"), with no preceding or following spaces.
- Do not use parentheses within parentheses. When necessary, use brackets for internal parentheses. **Exception:** basionym author(s), in combination, must **always** be in parentheses.
- For lists in text use parentheses around numbers, e.g., (1)..., (2)..., and (3)...
- For citation of types, see [Standardization of Nomenclatural Material](#) below.
- Within parentheses, use commas rather than connecting words for a series: "(Smith, 1952, 1959, 1962; Jones et al., 1962, 1965; Jain and Karchesky, 1990a,b)." Several references in a series within parentheses should be arranged chronologically (beginning with the earliest date) and then alphabetically for a given year.
- If a reference has two dates with one in brackets, cite date in brackets in text.
- Examples of author citations in text:
 - Two authors: Smith and Jones (1960) or (Smith and Jones, 1960)
 - Three authors or more: Doe et al. (1958) or (Doe et al., 1958)
 - In press: Davis (in press) or (Davis, in press)
 - Unpublished material: (B. L. Miller, unpubl. manuscript), (M. D. Donoghue, unpubl. data), (J. L. Doe, in prep.), or (J. L. Doe, pers. comm.); do not include these references in the "Literature Cited" section; make sure first initial(s) provided.

Literature Cited

- Verify references against original sources. Cross-check all references against citations in the text; make sure citations are present in both the text and the Literature Cited, and that they agree in both spelling and year.

- Place references in alphabetical order, then chronologically within the alphabet. For example, "Doe. 1968." comes before "Doe and Jones. 1961." [See below](#)
- Abbreviate titles of serial publications according to *Botanico-Periodicum-Huntianum* (G. H. M. Lawrence et al., 1968) and its supplement (G. D. R. Bridson and E. R. Smith, 1991), both published by the Hunt Institute for Botanical Documentation, Mellon University, Pittsburgh. Abbreviations for book titles should follow *Taxonomic Literature*, 2d ed. (F. A. Stafleu and R. S. Cowan, vols. 1--7, 1976--1988, Bohn, Scheltema and Holkema, Utrecht) or its recent *Supplements* (F. A. Stafleu and E. A. Mennega, vols. 1--4, 1992--1997, Koeltz Scientific Books).
- If an author has more than one publication in the same year, they should be lettered (a, b, c) and in alphabetical order according to title.
- Use a long dash (six hyphens) for immediately repeated names. [See below](#)
- Citations designated as "in press" must have been accepted for publication and the name of the journal included.
- Do not include unpublished data or manuscripts, or personal communications.
- There should be a period and a space after each initial of an author's name.
- After the colon following a volume number, there should be a space, then the page numbers. For example, "6: 312--330."
- Samples (0.5" hanging indent, author names in small-caps):
 - Journal:
 - Anderson, J. S. 1964. Existence...
 - ----- . 1996. Pollen evolution. *Amer. J. Bot.* 56(3): 23--25.
 - Carter, L. A., and B. E. Brown. 1954. Seedling...
 - ----- . 1969. New...
 - Carter, L. A., and C. K. Jones. 1950. Observations...
 - Book:
 - Benson, L., and R. A. Darrow. 1981. *Trees and Shrubs of the Southwestern Deserts*. 3d ed. Vol. 1. University of Arizona Press, Tucson.
 - Chapter in book:
 - Lan, Y. Z. 1966. The evolution of flavonoids in plants: A case study. Pages 1056--1095 in T. Swain, S. Thomson, and J. Houseman, eds., *Comparative Phytochemistry*. Academic Press, New York.
 - Flora:
 - ----- . 1970. *Loxostemon*. In T. Y. Cheo, ed., *Brassicaceae. Fl. Reipubl. Popularis Sin.* 33: 231--241. Science Press, Beijing.
 - Volume in a series:

- McNeill, W. H. 1975. *Composites of the American Midwest*. Vol. 2 of *Plants of the Midwest*. Smithsonian Institution Press, Washington, D.C.
- Dissertation:
 - Wright, F. Z. 1983. Cladistic analysis of flowering plants. Ph.D. diss., Department of Biology, University of Colorado, Boulder.
- In press:
 - Thompson, J. R. 2008. Reproduction of aroids. *Amer. J. Bot.*, in press.
- Web address:
 - Govaerts, R., J. Dransfield, S. F. Zona, D. R. Hodel, and A. Henderson. 2006. World Checklist of Areaceae. The Board of Trustees of the Royal Botanic Gardens, Kew; <http://www.kew.org/wcsp/> (accessed 11 November 2006, 19:30 GMT).

Standardization of Nomenclature Material

- For designation of herbaria, use the latest edition of *Index Herbariorum*. If specimens are cited, use the following form:
 - TYPE: ECUADOR. Los Rios: Rio Palenque Science Center, km 56 Quevedo-Santo Domingo, alt. 150--220 m, 23 Apr. 1973, *C. H. Dodson 5257* (Holotype: SEL [12345]; Isotype: RPSC).
- For examined specimens, including type, authors are encouraged to indicate the specimens they have not seen using the following form: "Campbell 4823 (MO [not seen]), rather than "[n.v.]" and rather than mark the ones they have seen---thus, "Campbell 4823 (MO)" not "Campbell 4823 (MO!)."
- For authors of botanical names, use *Authors of Plant Names* (R. K. Brummitt and C. E. Powell, 1992, Royal Botanic Gardens, Kew).
- For authors of fungal names, use [MycoBank](#) or [Index Fungorum](#).
- For abbreviations of titles of serial publications, see [Literature Cited](#) above.
- If specimens other than the type were examined, they should be listed under "Additional specimens examined." Please follow the following instructions:
 - Cite in alphabetical order by COUNTRY (all capitals), then in alphabetical order by State or Province followed by a colon, then in alphabetical order by County or District. List collector and number of collection in italics and the herbarium in parentheses.
 - Style for place names---U.S.A. Ohio: Smith County,.....;
 - Use N, S, E, W, SW, NE.
 - Spell out months.
 - Use the following form:
 - **Additional specimens examined:** GUATEMALA. Chimaltenango: Chichihuac, November--December 1930, *I. Skutch 75* (AMES, US).
 - **Additional specimens examined:** MEXICO. Chiapas: Mpio. Chamula, on the SW side of Zotehuitz, 30 July 1964, *I. I. Breedlove 6660* (AMES). Distrito Federal: S. Andrés, August

1930, *I. Lyonnnet 1528* (AMES). Jalisco: Mpio. Valle de Juárez, 6 km al SE de Mazamitla, 18 October 1989, *I. I. Soltero 681* (MEXU).

Figures

- Figures must be numbered consecutively according to their appearance in the text.
- Scale must be indicated on the figure itself.
- In text, write out "Figure" only at the beginning of sentences.
- Images for figures must measure at least 5.5" wide, and be 1200 ppi for black and white line drawings and 300 ppi for continuous tone images. TIFF file formats are preferred.
- Be sure that each figure is cited at least once in the text. Captions need not be complete sentences but should enable the reader to identify features of the illustrations without reference to the text and should contain definitions of all abbreviations that appear in the figure.

Figure Captions

- Use paragraph form, starting with a statement of inclusive numbers; see example below.
- Include letter ranges ("A-C") after the figure number only if more than one category of items in the figure.
- Do not use parentheses around "Drawn from..." acknowledgment line.
- Use the following format ("Figure" written in smallcaps, letters in bold):
 - Figure 1. *Scleria tropicalis* M. T. Strong. **A**, culm base and rhizome; **B**, section of culm showing sheaths and leaf blades. From *B. Stergois, L. J. Dorr, & R. Caracas 20858* (US).
 - Figure 2. *Cardamine cheotaiyenii* Al-Shehbaz & G. Yang. **A**, plant; **B**, portion of adaxial leaflet surface at margin; **C**, sepal; **D**, petal; **E**, stamen. A and C-E are based on the holotype; B is based on the isotype. Bars = 1 cm (A, D); 1 mm (B, C, E).
 - Figure 3. **A--B**. *Pomatocalpa kunstleri* (Hook. f.) J. J. Smith. **A**, habit; **B**, inflorescence. **C--D**. *Pomatocalpa macphersonii* (F. Muell.) T. E. Hunt. **C**, flower; **D**, dorsal sepal. A--B from *Schlecter 18287*; C--D from *Leiden Cult. 20030772* (US).

Tables

- Type each table on a separate sheet or sheets. Limit the number and length of tables as much as possible.

- The title should include the word "Table" in smallcaps and an Arabic numeral, followed immediately by the title text---centered, with sentence-style capitalization, and followed by a period. (e.g., Table 1. Spore statistics for *Ophioparma lapponica*.)
- Keep titles brief; take extraneous information out and place in a "Note:" at the foot of the table.
- Table footnotes should be referenced in the table by lowercase, superscript letters.

Keys

- Use the following model:
 - Inflorescence axillary; flowers sessile ... *Tachia* (9 spp.)
 - Inflorescence terminal or on axillary branches; flowers pedicellate or rarely sessile ... 2
 - Corolla with a corona at the insertion point of the stamens, usually over 7 cm long; fruit over 1.5 cm long with leathery pericarp; calyx 1.2--4.5 cm long, lobes acute ... *Symbolanthus* (30 spp.)
 - Corolla without a corona, less than 7 cm long; fruit less than 1.5 cm long with dry pericarp; calyx less than 1.2 cm long (rarely up to 2 cm), lobes round or rarely acute ... 3
 - Corolla aestivation contort at the apex, valvate below; stamens inserted in the corolla lobe sinuses ... *Aripuana* (1 sp.)
 - Corolla aestivation entirely contort; stamens inserted within the corolla tube ... 4
- The text for each numbered line is followed by a space, 3 periods, and a space.

Index to Numbered Collections

- Collectors names should be in alphabetical order; collectors names and collection number should be in italics.
- Numbers in bold in parentheses refer to the species number in the treatment.
- Please include author initials (not shown below).
- Follow the example below:
 - Index to Numbered Collections
 - Numbers in bold in parentheses refer to the species number in the treatment.
 - *Acosta s.n.* [AMES 40542] (**1**); *s.n.* [AMES 40552] (**24**).
 - *Aguilar 2667* (**20**).
 - *Alfaro 12* (**22**); *2484* (**15**).

- *Aublet s.n.* (21).
- *Barringer* 3162 (5).
- *Barringer & al.* 3672 (10); 3737 (4).
- *Clark & al.* 256 (12).
- *Cooper* 5969 (5); *s.n.* [Apr. 1887] (5).
- *Davidse & al.* 28407 (5); 28354 (5).
- ...etc.

Footnotes

- Authors are asked to minimize the number of footnotes. These should appear on the page to which they refer when limited to one or two per page. If extensive footnotes are required, they should appear at the end of the paper, right after the "Literature Cited" section.
- Format footnotes as "Footnotes" in Microsoft Word and use Arabic numbers.
- Footnotes should be numbered consecutively throughout the paper. If there is one author(s) affiliation than footnotes should begin with "2," if there is more than 1 author(s) affiliation(s) than use the corresponding Arabic number. (e.g., "3," "4," etc.)

Additional Resources

Fungal resources

[Mycobank](#)

[Indexfungorum](#)

Harvard Herbarium resources

[HUH Index of Botanical Publications](#)

[HUH Index of Botanists](#)

[HUH Index of Botanical Specimens](#)

Additional botanical resources

[The International Plant Names Index \(IPNI\)](#)

[Tropicos](#)

[Index Herbariorum](#)