

Flora of China

Guidelines for Contributors

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November 1995 [reprinted August 2002]

1. Introduction:

1.1 The purpose of the *Flora of China* project is to produce for the first time an English language flora of all the vascular plants of China. The project is being carried out under the supervision of a Joint Editorial Committee, which makes all policy decisions concerning the Flora.

1.2 Many botanists will be involved in producing the *Flora of China*. These guidelines are to help authors, editors, and reviewers to produce treatments that are as consistent as possible within a given volume and between various volumes of the Flora. It is recommended that contributors also consult the published volumes of the *Flora of China* for examples but not for manuscript formatting details (see section 26). However, because of inevitable minor changes in policy through time, the most recent guidelines adopted by the Editorial Committee, rather than the published volumes, will be the final word for editorial policy.

2. Coverage:

2.1 In addition to its publication in English, *Flora of China* differs from the Chinese *Flora Reipublicae Popularis Sinicae* in the following:

- a. The format is abbreviated.
- b. The treatments are updated to reflect the current understanding of the taxonomy and distribution of each group.
- c. Illustrations will be published in separate volumes.
- d. Exotic garden plants will not be included.

2.2 *Flora of China* will be published in 25 volumes plus an introductory volume. The Flora will account for all taxa treated in *Flora Reipublicae Popularis Sinicae* (except for exotic garden plants), together with those described or added to the Flora since volumes were published. The taxa treated in *Flora of China* include all native and naturalized vascular plants, as well as economically important cultivated plants, such as agricultural crops and those in plantations.

3. Order of Taxa: [updated 2002]

Flora of China will follow the same sequence of families as in *Flora Reipublicae Popularis Sinicae*, except that the monocots will follow the dicots. Pteridophytes will initially be arranged according to Ching's system (*Acta Phytotax. Sin.* 16(3): 1–19; 16(4): 16–37. 1978), but this will be reviewed by the Pteridophyta Subcommittee before the final draft is reached. Genera and species will be treated in taxonomic order*.

*[Added by Nick Turland, 6 Sep 2005:] Most manuscripts received from China are in the same order as the Chinese account in FRPS. Often this is simply the order in which the taxa are keyed out. Since the keys in FRPS are often top-heavy (larger groups of couplets first), they are rearranged to fit the FOC style (where the key format is mechanical, not reflecting taxonomy, with larger couplet groups second). In FOC this can result in an apparent taxonomic order of species which is merely an artefact of the old key format. Therefore, taxa should be re-arranged to reflect phylogeny, or to simply put into alphabetical order.

4. Organization and Timetables:

4.1 The 25 volumes of *Flora of China* will be published over a period of about 15 years. Preparation of manuscripts and input of plant data into a database program will take place concurrently.

4.2 It is anticipated that approximately two years will be needed for editing, revision, and review of the first draft of each volume and another year for publication. An average of two volumes will be published each year.

5. Authorship:

5.1 **Wu Zhengyi and Peter H. Raven Co-chairs of the Editorial Committee** will be printed on the first front page under the title *Flora of China*. On the second front page, all members of the Joint Editorial Committee and editorial assistants will be listed alphabetically.

5.2 Authors will be the person(s) who have made major contributions to the taxonomic treatments of the *Flora of China*. The Chinese author(s) will be listed first, separated by a semicolon from the names of co-author(s).

6. Keys:

6.1 Keys will be included for all taxa treated in the *Flora of China*. Keys to genera and infrafamilial taxa will be directly after the family description. Keys to species and infrageneric taxa will be placed directly after the generic description. Keys to infraspecific taxa will follow the specific description.

6.2 Keys will be dichotomous and in general artificial (see also paragraphs 12.1, 12.12, 12.13, and 26.7). Special attention must be given to the utility of keys for identifying specimens. If the two leads of a key have an unequal number of taxa, the lead with the fewer taxa will be first.

6.3 The halves of each dichotomy will be unambiguous and contrasting. The order of characters in each lead of the key will be the same and should be from most diagnostically important to least important. Multiple-entry keys will not be used.

However, when needed, a taxon can be keyed out more than once. Whenever possible, keys should include characters that can be seen from both flowering and fruiting plants.

6.4 Keys that contradict the descriptions will not be allowed. For example, if a lead in a key states that the leaves are lanceolate to ovate, all the taxa that are keyed out under this lead must have leaves that fall within this shape range. The key lead will have to be changed if the actual descriptions state that leaves include shapes that are outside this range.

6.5 It is recommended that authors write keys after the descriptions have been written and base the keys on the descriptions. The reason for this recommendation is to eliminate the problems of keys that contradict the descriptions (see 6.4).

7. Taxonomic Treatments:

7.1 Treatments will be from the level of family down to species or infraspecific taxon. Intrafamilial and infrageneric taxa (subfamily, tribe, subtribe, subgenus, section, subsection, series, and subseries) should be used sparingly. They may be useful for certain large families (e.g., Asteraceae and Fabaceae) or genera (e.g., *Carex*). For a particular genus a hierarchical system including subgenera, sections, subsections, series, and subseries may exist in the literature, but for the *Flora of China* it might be sufficient to use only genera or in large genera to additionally use subgenera or sections.

7.2 The treatments at each level will be similar (see below), but characters always present at a higher level will not be repeated at lower levels (i.e., if all members of a family have alternate leaves, this character state will not be repeated in the descriptions of the lower taxonomic units). In general the treatments at each level will be as follows:

a. **Families:** The family name will be given without an author, bibliographic citation, or synonyms. A concise description will be given plus a statement concerning the number of genera, the family distribution worldwide, and the number of genera in China. If subfamilies and tribes are used, their treatment will be the same as for the family.

b. **Genera:** The genus name will be followed by the author(s), bibliographic citation, synonymy (but see section 9), description, number of species, distribution worldwide, and number of species in China. If subgenera, sections, or series are used, their treatment will be the same as for the genus.

c. **Species:** The species name will be followed by the author(s), bibliographic citation, synonymy (but see section 9), description, flowering and fruiting time, chromosome number (if published), habitats, altitudinal range, and distribution. Any necessary discussion will be in a separate paragraph (see section 22).

d. **Infraspecific Taxa:** Subspecies and varieties will be treated in essentially the same way as species (but see paragraphs 12.1, 12.3, and 12.4). Quadrimorphs will not be used. Forms (forma) will not be treated or included.

8. New Combinations, Names, and Taxa: [updated 2002]

Until Volume 6 (2001), no nomenclatural novelties (new taxa, new combinations, *nomina nova*, or lecto-, neo-, or epitypifications) were published in the *Flora of China*. They were instead published in *Novon* or in other appropriate journals prior to their use in the *Flora of China*. This practice is still strongly encouraged. However, if a nomenclatural novelty is required and there is insufficient time to publish it separately from the *Flora of China*, then the novelty may be published in the *Flora of China* volume itself. An index of nomenclatural novelties is provided on the last page of each volume. During the preparation of the treatments, author(s) and co-author(s) are encouraged to jointly publish articles that include discussions, critical comments, and nomenclatural notes on Chinese plants. We expect that differences of opinion will not be published by those involved in this project before there has been an exchange of views between the author(s) and co-author(s).

9. Synonymy:

9.1 Synonyms are listed alphabetically in a separate paragraph (but see paragraph 9.5 for basionyms of recognized taxa). If more than one synonym is included, they will be separated by semicolons.

9.2 All Chinese taxa at the generic, specific, and infraspecific levels recognized in major floras of areas surrounding China (see section 25) will be included in synonymy when they are not recognized in the *Flora of China*, and the basionyms of all taxa cited in synonymy must be included. However, names included in these floras due to misidentification will not be treated as synonyms, although they should be mentioned in the discussion if deemed useful (see section 22). Pro parte citations should only be given when the protologue cites types now thought to belong to more than one currently recognized taxon and when the exact usage of the names has not been clarified by lectotypification. If possible contributors should lectotypify such names in a precursory paper rather than giving pro parte citations in the *Flora* (see section 8).

9.3 At the generic level synonyms widely used in the literature will also be included. Generic synonyms will include only the author(s). The type species of genera will not be indicated unless doing so is necessary to clarify the nomenclature. The citation will then be given in the discussion (see section 22).

9.4 At the specific and infraspecific levels only the main synonyms will be included beyond those necessitated by section 9.2. Synonyms of taxa occurring outside of China, and those for which the status is uncertain, should not be included in synonymy.

9.5. At the specific and infraspecific levels the complete bibliographic citation of synonyms is to be given only for basionyms of recognized taxa, and the author(s) alone will be given for other synonyms. Basionyms of recognized taxa will be listed as the first synonym rather than in alphabetical order.

10. Citations of Literature:

Only original literature, following the above guidelines, will be included (i.e., only the citation for the place of publication of taxonomic names). Auxiliary literature will not be cited (i.e., publications that cite or use a particular taxonomic name but are not the place of publication for that name).

11. Measurements, Dimensions, and Quantities:

11.1 All measurements will be metric, but the unit decimeter (dm) is not to be used. For most structures, millimeters are the smallest units to be used (see also paragraph 11.8) (e.g., "anthers 1.2--2 mm"), but for some structures, such as pollen or spores, it may be appropriate to use micrometers (e.g., "pollen 5--10 μm in diam.").

11.2 For single measurements "ca." or "to" will precede the measurement (e.g., "trees ca. 10 m tall" and "ovary to 2 mm"). Single numbers for quantitative characters are often exact so usually will not use "ca." (e.g., "filaments 10").

11.3 When a single measurement is used, the measurement indicates length, unless some other dimension is explicitly stated, and the word "long" will not be added (e.g., "filaments ca. 3 mm" rather than "filaments ca. 3 mm long" but use "stem ca. 5 mm in diam."). In the case of tree diameter use "d.b.h." for diameter at breast height, which is measured at 1.4 m above the base, rather than "diam."

11.4 If a range of measurements is found for a taxon, a double dash will separate the measurements which will be changed to an en-dash during formatting (e.g., "leaf blade 3--5 cm"). However, a single dash is used to separate a numbers from the words they describe (e.g. "style 3--5-lobed").

11.5 Exceptional measurements will be given in parentheses (e.g., "petiole 3--5(--7) cm"). However, do not use parentheses to indicate exceptional conditions for descriptive terms (e.g., do not use "leaf blade lanceolate (to ovate)" but use "leaf blade lanceolate to rarely ovate").

11.6 If two discontinuous states are commonly found in a taxon, the states will be separated by the word "or" rather than a double dash (see also paragraphs 12.6 and 12.7) (e.g., "stamens 5 or 10" and "petals 4 or 5"). Parentheses can also be used to express alternate states where such states are exceptional (e.g., "stamens 5(or 10)" and "style (3 or)4-lobed").

11.7 If both length and width are used, the measurements are given as length times width. For a times sign use a capital X with a space before and after the X (e.g., "leaf blade 4--6 X 1--3 cm" and "sepals ca. 4 X 1 mm"). During formatting, the capital X will be change to a times sign.

11.8 Use units that are appropriate for the scale of the measurements (but see exceptions in paragraphs 11.10 and 11.11). If a measurement would be an integer or an integer plus a

decimal fraction at the next higher or lower unit, then the next higher or lower unit will be used. For deciding what units of measurement are to be used, only consider the usual measurement not the exceptional measurement described in paragraph 11.5 (i.e., do not consider the measurements given in parentheses). For single measurement dimensions, transition from one unit of measurement to the next occurs when 10 units are reached (except for the transition from cm to m where the transition is at 100 cm because dm is not used) (e.g., "10 mm" becomes "1 cm"; "12 mm" becomes "1.2 cm"; "0.9 cm" becomes "9 mm"; "100 cm" becomes "1 m"; "120 cm" becomes "1.2 m"; "0.9 m" becomes "90 cm"). However, round off to the first decimal place (but also see elevations in section 19) (e.g., "3.53 cm" becomes "3.5 cm" and "4.15 mm" becomes "4.2 mm").

11.9 When a range is used, apply a mean of the range to the rules stated in paragraph 11.8 (e.g., "8--12 mm" becomes "0.8--1.2 cm"; "7--12 mm" does not change; "0.8--1 cm" becomes "8--10 mm"; "0.5--1.5 cm" does not change).

11.10 When X is used, apply the mean of the stated measurements to the rules stated in paragraph 11.8 (e.g., "8--12 X 9--12 mm" becomes "0.8--1.2 X 0.9--1.2 cm"; "8--12 X 7--12 mm" does not change; "ca. 9 X 5--17 mm" becomes "ca. 0.9 X 0.5--1.7 cm"). However, when X is used and the length and width are more than two orders of magnitude different, use different measurements for the length and width (e.g., use "20--30 cm X 0.5--1 mm" rather than "20--30 X 0.05--0.1 cm").

11.11 For keys the same units must be used for both leads which means that occasionally the rules in paragraph 11.8 are not followed for one of the couplets.

11.12 The following shows additional examples of the style that will be used and will not be used:

ovary (1--)3--5(--6) mm **NOT** ovary (1--) 3--5 (--6) mm
 leaf blade ca. 5 X 1--2 cm **NOT** leaf blade 5 X 1--2 cm
 leaf blade ca. 5 X 2 cm **NOT** leaf blade ca. 5 X ca. 2 cm
 leaf blade 2--5 X ca. 2 cm **NOT** leaf blade ca. 2--5 X 2 cm
 petiole 3.5--7 mm **NOT** petiole 3.5--7 mm long
 trees 10--15 m tall **NOT** trees 10--15 m
 shrubs 30--70 cm tall **NOT** shrubs 3--7 dm tall
 2-lobed **NOT** bilobed
 2-cleft **NOT** bifid
 nutlets 2 or 3 **NOT** nutlets 2--3
 (3 or)4(or 5)-carpellate **NOT** (3 or) 4 (or 5)carpellate
 3--6(or 7)-hooked **NOT** 3--6 (or 7)-hooked
 5(--7)-parted **NOT** 5--(--7)parted
 2(or 3)-lobed **OR** lobes 2(or 3)
 (5 or)6-veined **OR** veins (5 or)6
 4- or 5-valved **OR** valves 4 or 5
 4--6-valved **OR** valves 4--6
 (5--7)-ribbed **OR** ribs (5--7)
 3(--5)-sided **OR** sides 3(--5)

12. Descriptions:

12.1 Descriptions of families, genera, species, and infraspecific taxa will each be limited to about 130 words. It is expected that the descriptions for infraspecific taxa will in general be more concise except when only the infraspecific taxon occurs in China (see also paragraph 12.2). Descriptions at any level must be parallel for the taxa at that level (i.e., an attribute mentioned for one species should be mentioned for the other species within the same genus). Only critical and necessary characters used in the key should be repeated in the description, and the description and key must not contradict each other. The descriptions will include diagnostic characters (but see paragraph 12.2) and will not be monographic in extent.

12.2 Do not use diagnoses as a substitute for descriptions. Comparison with other taxa will not be used instead of, or as part of, a description but may be part of a discussion (see section 22).

12.3 If a species includes more than one infraspecific taxon in China, there will be a full description of the species as whole, and the descriptions of the infraspecific taxa (including the autonym) will be diagnostic for each taxon. This procedure is different from many floras where the autonym infraspecific taxon is described in detail and diagnostic characters are given for the other infraspecific taxa.

12.4 If only one infraspecific taxon of a species occurs in China, there will be no description under the species but a full description under the infraspecific taxon, but an indication of the overall distributional range of the species should be given.

12.5 Descriptions are to be in botanical English, which is mostly composed of nouns, adjectives, and conjunctions. For the *Flora of China*, descriptive botanical English does not contain verbs and has few articles (e.g. "the" is not used and "a" is used only when necessary).

12.6 Descriptions will follow the conventional order (i.e., habit, duration, sex, roots, stems, leaves, inflorescences, flowers, fruit, seeds). Each major part of a description will be in a separate sentence with semicolons used to separate subparts. At the beginning of each sentence and after each semicolon there must be a noun, and all the description until the end of the sentence or until a semicolon must refer back to that noun. Commas are used to separate the various components within the sentence. Note that a series with the use of "and" or "or" is treated as a single component (see paragraphs 12.4 and 12.12).

12.7 If two alternate states of a structure exist, they will be separated by the word "or," and when several alternate states exist, each state will be separated by a comma with the

final state preceded by a comma followed by "or" (e.g., "petals white or pink" and "petals white, pink, or blue").

12.8 If a range of shapes is found in a structure the word "to" will be used (e.g., "leaf blade oblong to ovate"). If a structure is meant to be described as intermediate in shape rather than a range between two extremes, a dash "" is used (e.g., "leaf blade lanceolate-ovate").

12.9 When characters are given in series, a comma will separate each component of the series and before the final "and" (e.g., "branchlets, petioles, and peduncles tomentose").

12.10 The general order that a structure should be described is as follows: color, shape, dimensions, texture, surface characteristics, base, margin, apex.

12.11 The following is the general order for describing specific structures:

Below ground parts: roots, underground stems

Stems: primary stems, trunks, bark, wood, branches, branchlets

Leaves: general arrangement, stipules, petiole, leaf blade, lobes, compound leaf axes, leaflets (segments in ferns), modified leaflets

Inflorescences: general, position, type, branches (i.e., description of axes), peduncle, bracts

Flowers: general features, pedicel, receptacle and hypanthium, calyx, corolla, corona, androecium (flowering), glands or disk, gynoecium (flowering)

Fruit: general, aggregation of or division within fruit, fruit or mericarp structure, accessory structures, multiple fruit structure

Seeds: external structures, germination, abortion, endosperm, megagametophytes, embryo

12.12 Descriptions and keys will be based on actual specimens and not taken from the literature; discrepancies between specimens and literature reports should be mentioned in the discussion (see section 22). Descriptions must be based on Chinese material, not on specimens from beyond the range of the Flora. When the characteristics of a taxon in China differ significantly from those found in individuals from the range outside of China, the difference(s) can be indicated in brackets (e.g., "leaf blade 5--10[--15] cm" and "leaves opposite [or alternate]").

12.13 In descriptions and keys nouns must be used as singular or plural depending on the condition found in the plant being described (e.g., "style 2--4 mm" is used when the flower has a single style but "styles 2--4 mm" is used when the flower has more than one style).

The following shows how the general rule for singular and/or plural would be applied for a particular shrubby species:

The species is composed of many **shrubs**.

The shrubs have many **branches**, many **leaves**, several **inflorescences**, many **flowers**, and many **fruit** (note that the plural of fruit is also fruit if they are all of one type).

The inflorescences have one **peduncle** and several **bracts**.

The leaves have one **petiole**, one **leaf blade**, one **adaxial surface**, one **abaxial surface**, one **base**, one **margin**, one **apex**, and several **veins** (not nerves).

The flowers have one **calyx**, one **corolla**, several **sepals** several **petals**, several **stamens**, one **ovary**, and one **style**.

The fruit have several **seeds**.

12.14 Terms such as above, back, below, beneath, bottom, front, lower, top, and upper should in general not be used because they are often ambiguous (but see the following two paragraphs). Rather, the terms adaxial, abaxial, apical, basal, proximal, or distal (or their adverbial forms adaxially, abaxially, apically, basally, proximally, or distally) should be used.

12.15 For zygomorphic flowers the terms upper and lower are to be used in describing the calyx and corolla lips (e.g., "upper lip" and "lower lip").

12.16 The terms apical or basal or upper and lower rather than proximal and distal should be used when describing structures on the main stem of a plant because proximal and distal are meaningless in this context. However, proximal and distal can be used when describing structures along a side branch because in this context distal means farther from the stem and proximal means closer to the stem.

12.17 The following is an example of the order and punctuation of a description:

Epilobium fangii C. J. Chen, Hoch, & Raven, Syst. Bot. Monogr. 34: 152. 1992.
Herbs perennial, erect. Stems 15--40 cm tall, strigillose with scattered glandular hairs, with 2 lines of hairs decurrent from margins of petiole. Leaves opposite, apically alternate; petiole 1--4(--6) mm; leaf blade elliptic to elliptic-oblong, 1--4 X 0.5--1.5 cm, leathery, subglabrous except for strigillose veins and margins, base cuneate to broadly cuneate, margin obscurely serrulate with 5--18 teeth on each side, apex subobtuse to sometimes acute. Inflorescences erect; bracts ca. 1/2 as long as ovaries. Pedicel 3--7 mm. Flowers erect; floral tube 0.6--1.1 mm. Sepals oblonglanceolate, 4--5 X 0.8--1.2 mm, keeled. Petals pink to rose-purple, narrowly obcordate, 6--7.5 X 2.8--3.5 mm, apical notch 1--1.5 mm. Filaments of longer set 2.8--3.5 mm but those of shorter set 2.4--2.6 mm; anthers 0.7--1 mm. Ovary 1.5--3 cm, glandular. Style 3--4 mm, glabrous or sparsely hairy near base. Stigma capitate, 0.8--1.1 mm. Capsule 3--7 cm, 1--1.8 mm in diam. Seeds narrowly obovoid, 1.1--1.4 X 0.3--0.5 mm, finely papillose; coma 6--7 mm. Fl. May-Aug, fr. Jun-Oct. $2n = 36@$.

* Open places along stream banks, at bases of rock walls or scree slopes; (1100--1700--3500 m. Sichuan, Yunnan.

Note in the sample entry above that each component of the description must not only refer back to the earlier noun but must also be grammatically correct such that the noun could be repeated before each component of the description (i.e., petals pink to rosepurple, (petals) narrowly obcordate, (petals) 6--7.5 X 2.8--3.5 mm).

13. Chinese Names of Plants:

Each recognized taxon will have one Chinese name with a corresponding *Hanyu Pinyin* transliteration. An index of the Chinese botanical names in Chinese characters and another of their transliteration using *Hanyu Pinyin* will be included at the back of each volume. The Chinese names will be arranged according to the number of strokes of the Chinese characters. Authors should prepare a list of Chinese names and their Pinyin transliterations for all recognized taxa.

14. Author Citations:

14.1 The family name of authors will be spelled out in full. When it is necessary to use the first and/or second initial of an author's name to differentiate authors with the same family name, initials published by R. K. Brummitt and C. E. Powell (eds.), *Authors of Plant Names*, Royal Botanic Gardens, Kew (1992), will in general be used, except for Chinese authors (see paragraph 14.2). The Editorial Committee may choose to differ for particular authors in East Asian botanical literature. The letter "f." will not be used for the Latin *filius* but instead the son's initial(s) will be used (e.g., "J. D. Hooker" rather than "Hooker f."), except when the names of the parent and descendant are identical (e.g., Linnaeus and Linnaeus f.). Do not use *et al.* when citing author names. Instead, all the authors must be listed.

14.2 Citation of Chinese authors names:

a. Author(s) of the names of taxa: use the form of the author name that follows the scientific name in the original publication. When no author name follows the scientific name use the form of the name of the author of the article. When the author name has not been romanized use the *Hanyu Pinyin* transliteration.

b. Literature citation: authors of articles will be cited as they were originally spelled. A comma will be inserted after the surname in such citations. In discussion do not use a comma between the last and first names of author(s).

c. Abbreviation of Chinese personal names: a capital letter followed by a period will be used for each syllable of a Chinese personal name. Hyphens will not be used. As an examples of literature citations and abbreviations: Li Xi Wen, Li Xi-wen, Li Xiwen, X. W. Li, and Li X. W. all become Li, X. W.

14.3 The symbol "&" will be used rather than the Latin *et* to separate the names of multiple authors (e.g., "Siebold & Zuccarini" not "Siebold *et* Zuccarini").

14.4 *Nomina nuda* will not be included as recognized taxa or in synonymy.

14.5 The term "in" will only be used when a complete bibliographic citation is given (e.g., "*Callicarpa gracilipes* Rehder in Sargent, Pl. Wilson. 3: 371. 1916."). If only the

author is given, "in" is not used (e.g., "*Clerodendrum trichotomum* var. *fargesii* (Dode) Rehder" rather than "*Clerodendrum trichotomum* var. *fargesii* (Dode) Rehder in Sargent").

14.6 If the author of a validly published taxon ascribes it to another person, the author citation will include the ascribed author followed by the term "ex" and then the publishing author (e.g., "*Buddleja macrostachya* Wallich ex Bentham").

15. Citation Abbreviations:

Periodical abbreviations will follow *BotanicoPeriodicum Huntianum* (BPH) and supplement (BPH/S). When the BPH/S differs from BPH, BPH/S should be followed. Book abbreviations will use the abbreviations of *Taxonomic Literature*, ed. 2 (TL2) and supplements, but the convention for capitalization will be consistent with BPH. Abbreviations that cannot be found in BPH or TL2 will follow the pattern consistent with abbreviations in Appendix A of *BotanicoPeriodicum Huntianum/Supplementum*. However, if there is uncertainty as to the abbreviation to follow, the question will be decided on a case by case basis by the Editorial Committee. When a Chinese title is not given in a Roman alphabet, the characters should be transliterated and underlined using *Hanyu Pinyin*, and this transliteration should be followed in parentheses by a translation of the title with abbreviations consistent with those in BPH (e.g., C. Y. Wu, *Yunnan Redai Yaredai Zhiwu Quxi Yanjiu Baogao* (Rep. Stud. Pl. Trop. Subtrop. Yunnan) 1: 35. 1965).

16. Nomenclatural Citations:

16.1 Literature citations will be in the following form:

Periodicals

W. M. Chu, *Acta Bot. Yunnan*. 1(2): 93. 1979.
Forbes & Hemsley, *J. Linn. Soc., Bot.* 26: 253. 1890.
Hu & Huang, *Acta Phytotax. Sin.* 10: 133. 1965.
Munir, *Gard. Bull. Straits Settlements*, ser. 3, 21: 360. 1966.
C. Y. Wu, *Yunnan Redai Yaredai Zhiwu Quxi Yanjiu Baogao* (Rep. Stud. Pl. Trop. Subtrop. Yunnan) 1: 35. 1965.

Books

Hesse ex Rehder in Bailey, *Stand. Cycl. Hort.* 2: 629. 1914.
Linnaeus, *Sp. Pl.* 1: 20. 1753.
Loureiro, *Fl. Cochinch.* 2: 411. 1790.
C. Pei & S. L. Chen, *Fl. Reipubl. Popularis Sin.* 65(1): 30. 1982.
Steudel, *Nomencl. Bot.*, ed. 2, 1: 217. 1840.

16.2 Issue numbers for volumes will be used only when the pagination is not continuous between issues (e.g., "*Acta Bot. Yunnan*. 1(2): 93. 1979." because the issues of this volume have separate pagination but "*Acta Bot. Yunnan*. 2: 205. 1980." because the pagination in volume 2 is continuous for the whole volume). Volume numbers will be

cited for multiple volume works that are normally bound by volume even when there is a continuous pagination for the work (e.g., "Sp. Pl. 1: 20. 1753.").

17. Terminology:

The botanical terminology will be kept as concise and accurate as possible. A comprehensive list of preferred terminology is available for contributors. Lawrence's *Taxonomy of Vascular Plants*, and Stearn's *Botanical Latin* (ed. 4, revised) are useful references.

18. Distribution:

18.1 In general, distributions will be given at the provincial level unless a taxon is highly restricted in distribution and a more detailed account is necessary (see paragraphs 18.3 and 18.6). Provinces and autonomous regions are listed alphabetically, and no distinction will be made between a province and an autonomous region (see also nonprovincial areas in paragraph 18.3). These divisions include the following: Anhui, Chongqing, Fujian, Gansu, Guangdong, Guangxi, Guizhou, Hainan, Hebei, Heilongjiang, Henan, Hubei, Hunan, Jiangsu, Jiangxi, Jilin, Liaoning, Nei Mongol, Ningxia, Qinghai, Shaanxi, Shandong, Shanxi, Sichuan, Taiwan, Xinjiang, Xizang, Yunnan, Zhejiang. These divisions can be modified by using the directions C, E, EC, N, NC, NE, NW, S, SC, SE, SW, W, or WC (e.g., "S Gansu, NE Sichuan"). Do not use a dash or the word "to" in order to indicate a distributional range (e.g., "Anhui-Shandong"; "Guizhou to Hubei"; "N-NW Yunnan"; or "S to SE Jiangsu" must not be used).

18.2 A taxon endemic to China is marked with an asterisk "*" at the beginning of the paragraph on the habitat and distribution (see the example in paragraph 12.17).

18.3 The inclusion of Beijing Shi, Hong Kong, Macao, Shanghai Shi, Nanhai Zhudao, and Tianjin Shi should be done only when the distribution within these regions is of particular note (i.e., plants are endemic to one of these regions or plants are found in one of these regions but not in the adjacent Chinese provinces) (e.g., "Fujian, Hong Kong, Nanhai Zhudao, Taiwan [Indonesia, Philippines]").

18.4 Attention must be paid to the following regarding place names:

- a. Any rivers, mountains, places, or islands on the Chinese border must use the standard Chinese names, not name from other languages, (e.g., "Heilong Jiang" not "Amur River" and "Qomolangma Feng" not "Mt. Everest").
- b. Chinese place names will be given according to the standards accepted now (e.g., "Jinhong" not "Cheli" and "Youyiguang" not "Zhengnanguang").
- c. Names of foreign countries will be the standard current ones (e.g., "Malaysia" not "Malaya"; "Sri Lanka" not "Ceylon"; "Thailand" not "Siam"; "Myanmar" not "Burma").
- d. A place name belonging to a country will not be listed in the same rank as that country (e.g., "Japan including Ryukyu Islands" not "Japan and Ryukyu Islands").
- e. For standard place names of China, authors should refer to *Gazetteer of China An Index to the Atlas of the People's Republic of China*, Map Press, Beijing (1983). It must

be noted that place names in Mongolian, Tibetan, and Uighur areas are often not standard *Hanyu Pinyin* and cannot be transliterated character by character using a dictionary.

f. For the standard names of places in foreign countries, authors should refer to the latest edition of the *National Geographic Atlas of the World*. If authors have further questions about place names, they should contact the Editorial Committee.

18.5 If a taxon is very local (i.e., only in a single *Xian* or on a single mountain) a more exact distribution can be given in parentheses (e.g., "Hubei (Lichuan *Xian*)" and "Sichuan (Emei Shan)"). However, a locality should not be given below the level of a *Xian* or mountain (see also paragraph 18.4e for transliteration problems).

18.6 If a taxon occurs beyond China, the distribution will be given in brackets and in alphabetical order. Only countries adjacent to China plus all other countries of tropical Asia, will be explicitly listed. These countries include Afghanistan, Bangladesh, Bhutan, Cambodia, India, Indonesia, Japan, Kazakhstan, Korea, Kyrgyzstan, Laos, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Russia, Singapore, Sri Lanka, Tajikistan, Thailand, Turkmenistan, Uzbekistan, and Vietnam. Both Kashmir and Sikkim are to be treated like countries and included in the alphabetical list of countries. If the distribution extends beyond these countries, a generalized range, separated from that of the foreign countries by a semicolon, will be given in the brackets. The generalized range includes Africa, SW Asia, Australia, Europe, North America, Pacific Islands, and South America (e.g., "Gansu, Qinghai, Xinjiang [Afghanistan, Kazakhstan, Pakistan, Russia; SW Asia, Europe]").

18.7 The words boreal, temperate, tropical, circumpolar, and subtropical will not be used. Also avoid using Eurasia (use Asia, Europe), Middle East (use SW Asia), Far East (list Japan, Korea, Mongolia, Russia).

19. Elevation:

Elevations are usually given as a range, but if a single elevation is given it should be preceded by "ca." except at the beginning of a sentence where the word "About" should be used rather than "Ca." If only the upper or lower elevational range is known use "below" or "above" (e.g., "below 1500 m" and "above 4000 m"). Do not use "0 m" rather use "near sea level" and for a range use the word "to" followed by the upper elevation. For plants with a distribution that is above sea level but less than 100 m use "below 100 m." For plants that occur above 100 m round the lower elevation down to the next lower 100 m and the upper elevation up to the next higher 100 m elevation. The following examples show what should be used:

"0 m" becomes "near sea level"

"0--500 m" becomes "near sea level to 500 m"

"50 m" becomes "below 100 m"

"50--700 m" becomes "below 100--700 m"

"150--250 m" becomes "100--300 m"

"590--800 m" becomes "500--800 m"

"100--240 m" becomes "100--300 m"

"2020--2520" becomes "2000--2600 m"

"3000 m" becomes "ca. 3000 m"

20. Flowering and Fruiting Time:

Flowering and/or fruiting time will be given by months using the first three letters of the month (e.g., "Fl. Jun--Aug, fr. Oct--Nov" and "Fl. and fr. Aug--Oct"). If only a general flowering and/or fruiting period is known, the season can be given (e.g., "Fl. late spring--summer").

21. Chromosome Number:

When they have been reported (i.e., published), chromosome numbers should be included at the end of the entry for taxa at the specific and infraspecific levels, and an "@" sign will follow the chromosome number if from Chinese material (see paragraph 12.17). All chromosome numbers will be cited as the somatic number (e.g., " $2n = 14$ " and " $2n = 36@$ "). Unpublished chromosome numbers will not be included.

22. Discussion:

Necessary discussion can be added at the end of each family, generic, specific, or infraspecific entry but should be concise. Discussion will normally concern problems of nomenclature, taxonomy, distribution, or biology that highlight further research needs. If a taxon is considered to be threatened or endangered, special attention should be drawn to this. Unlike descriptions, discussions must be in proper English sentences.

23. Uses:

Uses should be included when known, but must be kept brief. Examples of descriptive terms for uses could include fiber, ornamental, medicinal, oil, starch, or timber.

24. Miscellaneous Abbreviations and Symbols:

The following table gives the abbreviations and symbols that are to be used in the manuscripts.

Abbreviations and symbols	Unabbreviated form
*	endemic
@	chromosome number from Chinese material
±	plus or minus, more or less
??	missing data to be added before publication
[]	indicates distribution or morphological condition outside of China
µm	micrometer(s)
X	times
C	Central
ca.	circa, about, approximately
cm	centimeter(s)
cv.	cultivar
d.b.h.	diameter at breast height
diam.	diameter
E	East

EC	East Central
ed.	edition
e.g.	for example
et al.	and others
fig.	figure
fl.	flowering
fr.	fruiting
i.e.	that is
km	kilometer(s)
m	meter(s)
mm	millimeter(s)
N	North
NC	North Central
NE	Northeast
nom. cons.	<i>nomen conservandum</i>
nom. nov.	<i>nomen novum</i>
nom. nud.	<i>nomen nudum</i>
n.s.	new series
NW	Northwest
p.	page
pl.	plate
pp.	pages
p.p.	<i>pro parte</i>
S	South
SC	South Central
SE	Southeast
sect.	section
ser.	series
s.l.	<i>sensu lato</i>
s.s.	<i>sensu stricto</i>
sp., spp.	species
subfam.	subfamily
subgen.	subgenus
subsp., subspp.	subspecies
SW	Southwest
t.	table
var.	variety
vol.	volume
W	West
WC	West Central

25. Related Literature:

The following are major floristic works that must be consulted in preparing treatments for the *Flora of China* (see also section 9). Synonymy is expected to reflect the usage in

these floras, and authors are expected to consult the most recent edition when more than one edition has been published. Authors are also expected to be responsible for the recent literature related to their groups. E. D. Merrill and G. H. Walker, *A Bibliography of Eastern Asiatic Botany*, (1938) and E. H. Walker, *A Bibliography of Eastern Asiatic Botany, suppl. I* (1960), and S. C. Chen, et al. *Bibliography of Chinese Systematic Botany (1949-1990)* (1993) should also be consulted.

Anhui Zhiwuzhi

Flora Fujianica

Flora Guizhouensis

Flora Hainanica

Flora Hebeiensis

Flora Hupehensis

Flora in Deserti Reipublicae Populorum Sinarum

Flora Intramongolica

Flora of Intramongolica, Second Edition

Flora Liaoningica

Flora Loess Plateaus Sinicae

Flora Ningxiaensis

Flora of Beijing, Revised Edition

Flora of Guangdong

Flora of Guangxi

Flora of Taiwan

Flora of Taiwan, Second Edition

Flora of Zhejiang

Flora Reipublicae Popularis Sinicae

Flora Sichuanica

Flora Tsinlingensis

Flora Yunnanica

Flora Xinjiangensis

Flora Xizangica

Henan Zhiwuzhi

Iconographia Arbororum Yunnanicorum

Iconographia Cormophytorum Sinicorum

Iconographia Cormophytorum Sinicorum, Supplementum I and II

Index Florae Yunnanensis

Jiangsu Zhiwuzhi

Plantarum Herbacearum Chinae Boreali-Orientalis

Sylva Sinica

Vascular Plants of the Hengduan Mountains

Other important publications that should be consulted, in addition to those below, are: *Flora Europaea*, *Flora Malesiana*, *Flora of North America*, *Flora of the U.S.S.R.*, and *Flora Iranica*.

Aubréville, A. 1960. *Flore du Cambodge, du Laos, et du Vietnam*.

Backer, C. A. and R. C. Bakhuizen Van Der Brink. 1963-1968. *Flora of Java*.

Bentham, G. 1861. *Flora Hongkongensis*.

Corner, E. J. H. 1952. *Wayside Trees of Malaya*.
 Craib, W. G. 1925-1951. *Florae Siamensis Enumeratio*.
 Dunn, S. T. and W. J. Tutcher. 1912. *Flora of Kwangtung and Hong Kong (China)*.
 Forbes, F. B. and W. B. Hemsley. 1886-1905. *An enumeration of all the plants known from China proper*
 Grierson, A. J. C. and D. G. Long. 1983. *Flora of Bhutan*.
 Grubov, V. I. et al. 1963. *Plantae Asiae centralis*.
 Hara, H., et al. 1978-1982. *An Enumeration of the Flowering of Nepal*.
 Hooker, J. D. 1872-1897. *The Flora of British India*.
 Iwatsuki, K. et al., eds. 1993. *Flora of Japan*.
 Khan, M. M. 1972. *Flora of Bangladesh*.
 Kitagawa, M. 1979. *Neo Lineamenta Florae Manshuricae*.
 Lee, T. B. 1979. *Illustrated Flora of Korea*.
 Nasir, E. and S. J. Ali. 1971. *Flora of Pakistan*.
 Ohwi, J. 1965. *Flora of Japan*.
 Smitinand, T. and K. Larsen. 1970. *Flora of Thailand*.
 Steward, A. N. 1958. *Manual of Vascular Plants of the Lower Yangtze Valley China*.
 Walker, E. 1976. *Flora of Okinawa and the Southern Ryukyu Islands*.

26 Miscellaneous conventions to be used with specific reference to computer generated manuscripts.

26.1 Use the Courier 10 font throughout. This is a fixed spaced font that is the default for almost all computers and printers.

26.2 Do not use right justification.

26.3 Do not center any words or lines.

26.4 Do not hyphenate words when they are too long to fit on a line.

26.5 Use only one space after any punctuation mark and between any words or abbreviations.

26.6 Manuscripts should be single spaced in the computer, but double spaced when printed for purposes of editing. This makes the manuscripts easier to read on both the computer screen and as hard copies. The hard copies can also be more easily edited.

26.7 Keys need not be indented in the manuscripts but will be indented in the final printing. Any indenting of keys will be removed by the formatter before resetting the keys for final cameraready copy. There should be a hard return before the beginning of each lead of a key, and the alternate leads are to be labeled "a" and "b" after the number of the lead.

26.8 Paragraphs are to be indented with a tab. There should be no hard carriage returns within a paragraph, but there should be a two hard carriage returns (i.e. one blank line) at

the end of each paragraph. However, heading for families, genera, species, and infraspecific names start flushed left (i.e., without a tab), and after these headings there should be three hard carriage returns (i.e., two blank lines) which leaves enough space for Chinese common names to be added.

26.9 Headings of generic names should be in capitals and bold face (e.g., "**14. SWERTIA** Linnaeus, Sp. Pl. 1: 226. 1753.").

26.10 Headings of species should be in lower case (except for the first letter of the genus) and bold faced (e.g., "**2. Swertia divaricata** Harry Smith, Notes Roy. Bot. Gard. Edinburgh 26: 256. 1965."). Similarly, headings for infraspecific names should have the infraspecific name in bold face (e.g., "**3b. Swertia erythrosticta** var. **epunctata** T. N. Ho & S. W. Liu, Acta Biol. Plateau Sin. 1: 46. 1982.").

26.11 Hyphens are not to be used in a compound epithet except if the epithet is formed from words that usually stand independently (i.e., two nouns) (e.g., "*Solanum nivalomontanum*" not "*Solanum nivalomontanum*"; "*Strychnos nuxblanda*" not "*Strychnos nuxblanda*").

26.12 For generic names, the genus is spelled out in full the first time it appears in a paragraph, and it is subsequently abbreviated to the first letter unless the genus is the first word of a sentence in which case is again spelled out completely.

26.13 Most standard diacritic marks can be used in manuscripts. If necessary diacritic marks are not entered in the computer file, they can be clearly marked by hand on a submitted hard copy. Most diacritic marks can easily be included into computer files by using characters with ascii values greater than 127. However, the character set being used must be the IBMUS (PC8) Symbol Set. These characters can be produced by holding the Alt key down and then entering the appropriate ascii value on the number pad (you cannot use the number keys across the top of the keyboard) (e.g., ü = 129, é = 130, ç = 135, ê = 136, è = 138, á = 160, í = 161, ñ = 164).

26.14 Two question marks "??" should be placed in the manuscript wherever data are missing if these data are expected to be added to the manuscript before publication (i.e., page numbers for manuscripts that are in press).

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