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国产合瓣花植物名称的后选模式指定 —— I. 杜鹃花科

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摘 要:在整理保存于中国科学院植物研究所中国国家植物标本馆(PE)的国产合瓣花植物模式标本时,根据《国际藻类、菌类、植物命名法规》(墨尔本法规)规则 9.5,发现一些植物名称的模式为合模式,其中包括杜鹃花科的奇异杜鹃、怒江杜鹃、绢毛杜鹃、橙黄杜鹃、光蕊杜鹃、棕背川滇杜鹃、拟镰果杜鹃、镰果杜鹃、粘毛杜鹃、粗毛杜鹃、腾冲杜鹃、剑川杜鹃和红粗毛杜鹃。遵照规则 8.1、9.11 和 9.12,以及辅则 9A.3 的精神,对这 13 个名称做出后选模式指定。

关键词:中国;合瓣花植物;杜鹃花科;后选模式;模式指定

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Lectotypifications of Some Names in Sympetalae from China ——I. Ericaceae

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Abstract: In type specimens deposited at China National Herbarium (PE), Institute of Botany, Chinese Academy of Sciences, the types of some taxon names in Sympetalae from China are found to be syntypes under Article 9.5 of International Code of Nomenclature for algae, fungi, and plants (Melbourne Code), including Rhododendron aberrans Tagg & Forrest, R. aemulorum I. B. Balf., R. chaetomallum I. B. Balf. & Forrest, R. citriniflorum I. B. Balf. & Forrest, R. coryanum Tagg & Forrest, R. dictyotum I. B. Balf. ex Tagg, R. fulvoides I. B. Balf. & Forrest, R. fulvum I. B. Balf. & W. W. Smith, R. glischrum I. B. Balf. & W. W. Smith, R. habrotrichum I. B. Balf. & W. W. Smith, R. hardingii Forrest ex Tagg, R. niphargum I. B. Balf. & Ward, R. rude Tagg & Forrest in Ericaceae. According to Article 8.1, 9.11 and 9.12, and Recommendation 9A.3, we designated lectotypes for thirteen names here.

Key words: China; Sympetalae; Ericaceae; lectotype; typification

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With funding by Key Project for the Development of State Facilities and Information Infrastructure for Science and Technology (National Specimen Information Infrastructure, 2005DKA21401), we started the normalized compilation of type specimens of species or infra-species taxon names which deposited at PE since 2005. Digitalization construction of nearly 20 thousands type specimens have been completed while the specimen, original literature text information as well as image information can be retrieved on the websites of Chinese Virtual Herbarium and National Specimen Information Infrastructure.

By means of verifying specimens with original literatures (the protologues), it is found that types of some names are syntypes while doing the normalized compilation. Therefore, we chose syntype specimens with situations stated below in the first place. The original literature indicates that syntype specimens are deposited at PE, syntype specimens that can be proved deposited at PE according to International Code of Nomenclature for algae, fungi, and plants (Melbourne Code)^[1] and the work unit of original author has disintegrated during Anti-Japanese War hence syntype specimens are transferred and deposited at PE by original author or gatherer. Lectotypes are designated for related names in those syntypes^[2-8].

During the process of normalized compilation we also noticed that a number of type specimens which are looted abroad from late 16th century to 1940s were reunited with the Motherland in various forms and deposited at PE as a result of the establishment of People's Republic of China. Science and technology of our country developed rapidly, China's international prestige grew significantly and extensive cooperation and communication appears between foreign countries and China. For example, during 1956 to 1957 Institute of Botany, Chinese Academy of Sciences arranged two botany experts to Herbarium (LE), V. L. Komarov Botanical Institute of the Academy of Sciences of the U. S. S. R. for friendship cooperative study. With communication, negotiation, communication and

exchange, a mass of normal specimens and type specimens collected from China were brought back including syntype specimens. While in 1990, with the invitation of Botanical Museum (UPS), Uppsala University, Sweden, plant taxonomists of Institute of Botany, Chinese Academy of Sciences went to Sweden for cooperative study. After negotiation and cooperation, plenty of plant specimens (including type specimens) collected from China was returned. Besides, Institute of Botany, Chinese Academy of Sciences has communicated, cooperated and exchange with Herbarium (K), Royal Botanic Gardens, Kew, England, U. K., Herbarium (E), Royal Botanic Garden, Edinburgh, Scotland, U. K., Perbier (P), Laboratire de Phanérogamie, Muséum National d'Histoire Naturelle, France and other international herbaria which collect numerous plant specimens from China so that type specimens gathered in China are able to return home. For those syntype specimens that were return from foreign countries, we shall finish the normalized compilation as soon as possible so that Chinese are able to have the initiative in hands during research.

With retrieving original literatures (the protologues) and verification of type specimens that return from abroad, it is found that some names in Sympetalae that published before January 1st, 1958 simultaneously cited two or more than two gatherings without indicating the type in the protologues. After retrieving related literatures and professional websites, nobody has designated lectotypes for these names. According article 9.5 of International Code of Nomenclature for algae, fungi, and plants (Melbourne Code), a syntype is the any specimen cited in the protologue when there is no holotype, or any one of two or more specimens simultaneously designated as types. We follow Article 8.1, 9.11, 9.12 and Recommendation 9A.3, lectotypes for these names are here designated. Types of these names were standardized, permanently attached and deposited element (single specimen) in China, as well as the digital construction.

The lectotypes for thirteen names in Ericaceae

are here designated in the present paper, and lectotypes for plant names of other families will be designated one after another.

Ericaceae

1 Rhododendron aberrans

Tagg & Forrest in Notes Roy. Bot. Gard. Edinburgh 15: 305. 1927. **Type**: China. Yunnan: Jianchuan, alt. 4 000 m, June 1923, G. Forrest 23373 (lectotype, PE Herb. Bar Code No. 00005647, designated here, PE!).

When *Rhododendrom aberrans* Tagg & Forrest was published in 1927, the authors cited three gatherings (G. Forrest 23373, 23379 and 23395) without indicating the type in the protologue^[9].

After retrieving the syntype specimen G. Forrest 23373 (=PE Herb. Bar Code No. 00005647), E which was exchanged with the author's work unit, this specimen is chosen as the lectotype because it is better preserved (with complete branches, leaves and flowers), agrees with the protologue, was signed a new species determination label by Tagg & G. Forrest and has a basic data label on the mounting paper.

2 Rhododendron aemulorum

I. B. Balf. in Notes Roy. Bot. Gard. Edinburgh 12; 86. 1920. **Type:** China. Yunnan: N'Maikha-Salween divide, July 1919 G. Forrest 18354 (lectotype, PE Herb. Bar Code No. 00027580, designated here, PE!).

When *Rhododendron aemulorum* I. B. Balf. was published in 1920, the author cited four gatherings (G. Forrest 17853, 17995, 18354 and Farrer 815) without indicating the type in the protologue^[10].

After retrieving the syntype specimen G. Forrest 18354 (=PE Herb. Bar Code No. 00027580), E given by the author's work unit to PE, this specimen is chosen as the lectotype because it is better preserved (with complete branches, leaves and fruits), agrees with the protologue, was signed a new species determination label by I. B. Balf. and has a basic data label on the mounting paper.

3 Rhododendron chaetomallum

I. B. Balf. & Forrest in Notes Roy. Bot. Gard. Edinburgh 12: 95. 1920. **Type:** China. Yunnan: Mekong-Salween divide, alt. 4 300 m, October 1918, G. Forrest 17330 (lectotype, PE Herb. Bar Code No. 00027590, designated here, PE!).

When Rhododendron chaetomallum I. B. Balf. & Forrest was published in 1920, the authors cited four gatherings (G. Forrest 14987, 16691, 17329 and 17330) without indicating the type in the protologue^[10].

After retrieving the syntype specimen G. Forrest 17330 (=PE Herb. Bar Code No. 00027590), E given by the author's work unit to PE, this specimen is chosen as the lectotype because it is better preserved (with complete branches, leaves and fruits), agrees with the protologue, was signed a new species determination label by I. B. Balf. & G. Forrest and has a basic data label on the mounting paper.

4 Rhododendron citrini florum

I. B. Balf. & Forrest in Notes Roy. Bot. Gard. Edinburgh 11: 35. 1919. **Type:** China. Yunnan: Mekong-Salween divide, alt. 4 300 m, July 1917, G. Forrest 14272 (lectotype, PE Herb. Bar Code No. 00027623, designated here, PE!).

When *Rhododendron citriniflorum* I. B. Balf. & Forrest was published in 1919, the authors cited four gatherings (G. Forrest 14271, 14272, 14274 and 14356) without indicating the type in the protologue^[11].

After retrieving the syntype specimen G. Forrest 14272 (=PE Herb. Bar Code No. 00027623), E given by the author's work unit to PE, this specimen is chosen as the lectotype because it is better preserved (with complete branches, leaves and flowers), agrees with the protologue, was signed a new species determination label by I. B. Balf. & Forrest and has a basic data label on the mounting paper.

5 Rhododendron coryanum

Tagg & Forrest in Notes Roy. Bot. Gard. Edinburgh 15: 99. 1926. **Type**: China: Xizang: Tsarong, Salween-Kiu-Chiang divide, alt. 4 000—

4 700 m, October 1921, G. Forrest 20832 (lectotype, PE Herb. Bar Code No. 00027620, designated here, PE!).

When Rhododendron coryanum Tagg & Forrest was published in 1926, the authors cited four gatherings (G. Forrest 20322, 20832, 21693 and 22889) without indicating the type in the protologue^[12].

After retrieving the syntype specimen G. Forrest 20832 (=PE Herb. Bar Code No. 00027620), E given by the author's work unit to PE, this specimen is chosen as the lectotype because it is better preserved (with complete branches, leaves and fruits), agrees with the protologue, was signed a new species determination label by Tagg & Forrest and has a basic data label on the mounting paper.

6 Rhododendron dict yotum

I. B. Balf. ex Tagg in Notes Roy. Bot. Gard. Edinburgh 15: 309. 1927. **Type**: China. Xizang: Mekong-Salween divide, alt. 4 300 m, October 1918, G. Forrest 17332 (lectotype, PE Herb. Bar Code No. 00027616, designated here, PE!).

When Rhododendron dictyotum I. B. Balf. ex Tagg was published in 1927, the author cited two gatherings (G. Forrest 16734 and 17332) without indicating the type in the protologue^[9].

After retrieving the syntype specimen G. Forrest 17332 (=PE Herb. Bar Code No. 00027616), E given by the author's work unit to PE, this specimen is chosen as the lectotype because it is better preserved (with complete branches, leaves and fruits), agrees with the protologue, was signed a new species determination label by I. B. Balf. and has a basic data label on the mounting paper.

7 Rhododendron fulvoides

I. B. Balf. & Forrest in Notes Roy. Bot. Gard. Edinburgh 12: 112. 1920. **Type**: China. Yunnan: Mekong-Yangtze divide, alt. 4 000 m, August 1914, G. Forrest 13029 (lectotype, PE Herb. Bar Code No. 00027605, designated here, PE!).

When Rododendron fulvoides I. B. Balf. & Forrest was published in 1920, the authors cited twelve gatherings (G. Forrest 12967, 13029, 13400,

13556, 14499, 14988, 15278, 16140, 16515, 16516, 16720 and 16721) without indicating the type in the protologue^[10].

After retrieving the syntype specimen G. Forrest 13029 (=PE Herb. Bar Code No. 00027605), E given by the author's work unit to PE, this specimen is chosen as the lectotype because it is better preserved (with complete branches, leaves and fruits), agrees with the protologue, was signed a new species determination label by I. B. Balf. & Forrest and has a basic data label on the mounting paper.

8 Rhododendron fulvum

I. B. Balf. & W. W. Smith in Notes Roy. Bot. Gard. Edinburgh 10: 110. 1917. **Type:** China. Yunnan: Shweli-Salween divide. alt. 3 300—3 700 m, August 1912, G. Forrest 8989 (lectotype, PE Herb. Bar Code No. 00027602, designated here, PE!).

When Rododendron fulvum I. B. Balf. & W. W. Smith was published in 1917, the authors cited four gatherings (G. Forrest 8989, 9001, 11842 and 11940) without indicating the type in the protologue^[13].

After retrieving the syntype specimen G. Forrest 8989 (=PE Herb. Bar Code No. 00027602), E which was exchanged with the author's work unit, this specimen is chosen as the lectotype because it is better preserved (with complete branches, leaves and fruits), agrees with the protologue, was signed a new species determination label by I. B. Balf. & W. W. Smith and has a basic data label on the mounting paper.

9 Rhododendron glischrum

I. B. Balf. & W. W. Smith in Notes Roy. Bot. Gard. Edinburgh 9: 229. 1916. Type: China. Yunnan: Yangtze-Mekong divide, alt. 4 300 m, July 1914, G. Forrest 12901 (lectotype, PE Herb. Bar Code No. 00027594, designated here, PE!).

When Rhododendron glischrum I. B. Balf. f. & W. W. Smith was published in 1916, the authors cited two gatherings (G. Forrest 12901 and 13564) without indicating the type in the protologue^[14].

After retrieving the syntype specimen G. Forrest 12901 (=PE Herb. Bar Code No. 00027594), E given by the author's work unit to PE, this specimen is chosen as the lectotype because it is better preserved (with complete branches, leaves and flowers), agrees with the protologue, was signed a new species determination label by I. B. Balf. & W. W. Smith and has a basic data label on the mounting paper.

10 Rhododendron habrotrichum

I. B. Balf. & W. W. Smith in Notes Roy. Bot. Gard. Edinburgh 9: 232. 1916. **Type:** China. Yunnan: Western flank of the Shweil-Salween Divide, 3 300—3 700 m, August 1912, G. Forrest 9048 (lectotype, PE Herb. Bar Code No. 00027652, designated here, PE!).

When *Rhododendron habrotrichum* I. B. Balf. & W. W. Smith was published in 1916, the authors cited two gatherings (G. Forrest 9048 and 12054) without indicating the type in the protologue^[14].

After retrieving the syntype specimen G. Forrest 9048 (=PE Herb. Bar Code No. 00027652), E given by the author's work unit to PE, this specimen is chosen as the lectotype because it is better preserved (with complete branches, leaves and fruits), agrees with the protologue, was signed a new species determination label by I. B. Balf. & W. W. Smith and has a basic data label on the mounting paper.

11 Rhododendron hardingii

Forrest ex Tagg in Notes Roy. Bot. Gard. Edinburgh 16: 196. 1931. **Type:** China. Yunnan: Tengyueh (= Tengchong), August 1925, G. Forrest 27195 (lectotype, PE Herb. Bar Code No. 00027650, designated here, PE!).

When *Rhododendron hardingii* Forrest ex Tagg was published in 1931, the author cited six gatherings (G. Forrest 15954, 18415, 26313, 26416, 27195 and 27415) without indicating the type in the protologue^[15].

After retrieving the syntype specimen G. Forrest 27195 (=PE Herb. Bar Code No. 00027650), E given by the author's work unit to PE, this specimen is chosen as the lectotype because it is better preserved (with complete branches, leaves and fruits), agrees with the protologue, was signed a new species determination label by G. Forrest and has a basic data label on the mounting paper.

12 Rhododendron niphargum

I. B. Balf. & Ward in Notes Roy. Bot. Gard. Edinburgh 10: 125. 1917. Type: China. Yunnan: Jianchuan, alt. 3 300 — 3 700 m, July 1914, G. Forrest 13035 (lectotype, PE Herb. Bar Code No. 00027682, designated here, PE!).

When *Rhododendron niphargum* I. B. Balf. & Ward was published in 1917, the authors cited eight gatherings (G. Forrest 10292, 10639, 10914, 11421, 11738, 12435, 13035 and F. K. Ward. 324) without indicating the type in the protologue^[13].

After retrieving the syntype specimen G. Forrest 13035 (=PE Herb. Bar Code No. 00027682), E which was exchanged with the author's work unit, this specimen is chosen as the lectotype because it is better preserved (with complete branches, leaves and flowers), agrees with the protologue, was signed a new species determination label by I. B. Balf. & Ward and has a basic data label on the mounting paper.

13 Rhododendron rude

Tagg & Forrest in Notes Roy. Bot. Gard. Edinburgh 16: 207. 1931. **Type:** China. Yunnan: Salween-Kiu Chiang divide. alt. 4 000 m, June 1924, G. Forrest 25645 (lectotype, PE Herb. Bar Code No. 00027655, designated here, PE!).

When *Rhododendron rude* Tagg & Forrest was published in 1931, the authors cited two gatherings (G. Forrest 25645 and 25777) without indicating the type in the protologue^[15].

After retrieving the syntype specimen G. Forrest 25645 (=PE Herb. Bar Code No. 00027655), E given by the author's work unit to PE, this specimen is chosen as the lectotype because it is better preserved (with complete branches, leaves and flowers), agrees with the protologue, was signed a new species determination label by Tagg & Forrest

and has a basic data label on the mounting paper.

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