

Collection of Hugh Cuming in the Moscow University Herbarium (MW)

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Hugh Cuming's collection of flowering plants kept in the Moscow University Herbarium (MW) was studied. It contains 420 type specimens (271 isotypes, 5 possible isotypes, 22 isolectotypes, 1 isoneotype, 5 paratypes, 96 syntypes, 3 possible syntypes, 4 types of unknown status, 9 possible types, 1 authentic specimen, and 3 possible authentic specimens), 403 non-type specimens and 106 specimens of unknown status. A list of 395 taxa based upon Cuming's collections in MW is given.

Key words: Cuming, Malesia, Moscow University Herbarium, Philippines, type specimens.

1. Introduction

The Herbarium of the Moscow State University (MW) is the second largest herbarium in Russia after the Komarov Botanical Institute in St. Petersburg (LE). It holds 907.850 specimens (1 February 2010) collected worldwide but with the strong emphasis on the flora of European Russia. This Herbarium is older than the other Russian botanical institutions with herbarium collections, and therefore several important historic collections are preserved here. These are the personal herbaria of Jakob Friedrich Ehrhart, Georg Franz Hoffmann, Carl Bernhard von Trinius, Johann Reinhold and George Forsters (Balandin 2002, 2003, 2006). A small set of original specimens from Carl Linnaeus' collection contains some unique material (Sokoloff et al. 2002). It is a common practice in all Russian Herbaria including MW to separate type specimens from the body of collections for the sake of careful handling and safe preservation. A complete catalogue of type specimens (Gubanov 2002) and a detailed collections' guide (Balandin 2006) were published recently. Unfortunately, these sources have no information on Cuming's specimens preserved in MW. This contribution reflects an outstanding value of the rediscovered SE Asian Cuming's collection, which is especially rich in types.

Hugh Cuming, Esq. (14 February 1791 – 10 August 1865) is a well-known British merchant, naturalist, and collector. His passion and professional field was malacology, although he made extensive collections of diverse plant and animal groups. At his own

expense he made two voyages to South America, a trip to Polynesia, and spent almost four years in SE Asia (1836–1840). These years of his life are fairly well known due to extensive correspondence (see van Steenis Kruseman 1950, 1958, 1974 for details and bibliography), but some key-points of his Philippine voyage should be recalled briefly once again.

Cuming left England in 26 February 1836 and arrived to Manila 24 July 1836. The rainy season had set in, and therefore he could not make any excursions in the archipelago until the end of September. Then he left Manila for Calauan in the centre of Luzon, remaining until 15 December. He visited in 1837 the islands in the south (this trip occupied 10 months): Panay, Guimaras, Negros, Siquijor, Cebu, Bohol, Camiguin de Misamis, and Mindanao; Southern Islands (viz Samar, Leyte, Masbate, Ticao, Burias, and Mindoro) and the SE provinces of Luzon (Albay, Camarines, Tayabas, and Batangas). He returned to Manila in November 1838, preparing for a trip to the northern part of Luzon. In the late 1839 Cuming left Manila, proceeding to Singapore, Malay Peninsula, and Sumatra. His trip back to England in 1840 was via St. Helena.

Cuming had been selling his vast natural collections to European private researchers. His herbarium of flowering plants consisted of ca. 2000 species with hundreds of novelties among them. These plant collections were distributed among European private herbaria, and were subsequently accumulated in the largest institutional herbaria of Europe and North America¹. One can find that Lindemann (1885) called Cuming one of the most fruitful plant collectors of his time, with 130.000 specimens collected for just 10 years of field work. Due to extensive sets of duplicates Cuming's specimens played a vital role in the stability of Malesian plants nomenclature in 19th century.

Cuming's duplicates were real exsiccatae in the modern meaning of this term – numerous duplicates of one species were collected in one place and in one time. Cuming was not a botanist, but his accurate plant recognition was outstanding, and, consequently, only very few collections in his exsiccatae appeared to be mixed. Cuming had no fixed number of specimens in his sets, and therefore the majority of his sets presently kept in public herbaria are lacking some species. Common species are represented in 20+ herbaria, whereas some collections are rarely found. This holds especially true for 111 numbers of Philippine orchids (## 2043–2153). For instance, MW possesses only 15 of them.

The *Moscow Imperial Society of Naturalists* was not the first purchaser of Cuming's exsiccatae, and that is why Moscow part of his collection is incomplete. The herbarium of the Society was merged with the Moscow University Herbarium in 1890s. Another set, larger and more complete, was acquired to St. Petersburg and is preserved in the Komarov Botanical Institute (LE). The Great Russian plant taxonomist Nicolai Turczaninow owned the third set of Cuming's collections in Russia (now preserved in KW, Ukraine).

2. Material and methods

For a long time Cuming's collection was preserved in MW unmounted in the authentic folders, exactly as it was delivered to the Society. It was mounted in early 1970s under supervision of Curator Ivan Gubanov, who made some handwritten copies of labels in the

¹ See the web-version of *Cyclopaedia of Malesian Collectors* (<http://www.nationaalherbarium.nl/fmcollectors/>) for complete list of institutions.

cases when excessive material was separated on extra sheets. Bobrov and Gubanov (1979) carefully separated all pteridophytes from Cuming's collections at MW and LE and revealed many fern types. This work was a mirror of the similar revision made earlier by Holtum (1968) in the historic collection of Carl Presl preserved in Prague.

The flowering plants collected by Cuming in the Philippines, Molucca, and Sumatra have been left mostly unsorted in the MW herbarium, because they were completely unidentified. That is why Cuming's exsiccatae were packed in two large cardboard boxes, stored in a remote corner of the herbarium. Only the *Annonaceae* and *Myristicaceae* specimens were tested by Nguyễn-Tiên-Bân, a Vietnamese PhD. student from the Komarov Botanical Institute in 1973. Also some specimens from easily recognisable families were sorted to cabinets among other Asian collections as *Gramineae* spp., *Cyperaceae* spp., *Leguminosae* spp., *Compositae* spp., etc. Separate keeping facilitated my task to compile a list of Cuming's specimens without scanning the whole Asian branch of the MW herbarium.

Surprisingly Cuming's collection in MW was not labelled according to comprehensive albeit old catalogue *Phanerogamae Cumingianae Philippinarum* by Sebastian Vidal y Soler (1885). Even numerous isotypes of Turczaninow's species² published in a series of articles in *Bulletin de la Société Imperiale des Naturalistes de Moscou* were completely neglected.

According to Bobrov & Gubanov (1979), MW and LE hold several thousands Cuming's specimens each. My calculation makes this figure more modest at least for MW. I counted 929 specimens of flowering plants in MW (in Cuming's vascular plants exsiccatae there are ca. 19% of pteridophytes and ca. 81% of flowering plants). As for LE, Bobrov & Gubanov (1979) found that St. Petersburg collection is 3 times larger in the number of specimens and 1.5 times more representative in the number of species.

Cuming's specimens in MW are labelled with small tags with numbers, locality names in minute handwriting and collector's surname. The standard sequence of numbers in Cuming's exsiccatae was published by Vidal y Soler (1885) and considerably corrected by Rolfe (1908). The sequence of this list is as follows:

- 1–434 — pteridophytes (Philippines, Sumatra, Malacca)
- 435–1920 — seed plants from miscellaneous families (Philippines)
- 1921–1944 — *Moraceae* (Philippines)
- 1945–1979 — *Loranthaceae* (Philippines)
- 1980–2042 — cryptogams (club-mosses, mosses, lichens, fungi)
- 2043–2153 — *Orchidaceae* (Philippines)
- 2154–2242 — cryptogams (mosses, lichens, fungi)

² There is a misbelief (see, for instance, the web-version of *Cyclopaedia of Malesian Collectors*), that MW or/and LE possess Turczaninow's holotypes. In the case of MW this belief is largely based on the fact, that his protologues were published in *Bulletin de la Société Imperiale des Naturalistes de Moscou* (this serial is still continued as *Byulleten' Moskovskogo Obshchestva Ispytatelei Prirody, Otdel Biologicheskii*). The personal collection of Turczaninow with numerous authentic specimens was conserved for a long time in the Kharkov University. Nazi decided to move this treasure to Germany as a war trophy in 1940s, but due to a logistic mistake the railway carriage had not arrived to the destination point. Turczaninow's herbarium was completely returned by restitution to Kiev soon after the end of World War II. Now this historic collection is conserved in the Kholodny Botanical Institute, Kiev (Ukraine) as a separate unit, and the holotypes should be searched for there.

2243–2464 — seed plants from miscellaneous families, incl.
2252–2399 from Malacca,
2400–2427 from Singapore,
2428–2443 from Sumatra,
2444–2464 from St. Helena.

For proper attribution of types in Cuming's herbarium I performed several steps, i.e. 1) complete listing of specimens present in MW according to the tag numbers, 2) taxonomic expertise of correspondence between specimens and names given in Vidal's list (Vidal y Soler 1885), 3) searching for Cuming's duplicates in web databases of world's leading Herbaria (these are usually types), 4) checking protologues for proper attribution of the type category, 5) searching for accepted names in monographs and critical articles.

All these steps would have been extremely time-consuming without Internet, and I guess several years ago this project would have failed in the beginning. But nowadays extensive digital databases of specimens are launched in many Herbaria, and completely all protologues of species based upon Cuming's collections are accessible in digital libraries. Hundreds of Cuming's specimens are databased within the digital collections of the following institutions:

- Nationaal Herbarium Nederland, Leiden University branch (L)
(<http://145.18.162.53:81/c8>)
- Royal Botanic Gardens, Kew (K)
(<http://apps.kew.org/herbcat/gotoSearchPage.do>)
- Missouri Botanical Garden (MO)
(<http://www.tropicos.org/SpecimenSearch.aspx>)
- Conservatoire et Jardin botaniques de la Ville de Genève (G)
(<http://www.ville-ge.ch/musinfo/bd/cjb/chg/advanced.php>)
- Harvard University Herbaria (A & GH)
(http://asaweb.huh.harvard.edu:8080/databases/specimen_index.html)
- Botanical Garden and Museum, University of Copenhagen (C)
(<http://130.225.211.158/typedatabase/search.htm>)
- New York Botanical Garden (NY)
(<http://sciweb.nybg.org/science2/vii2.asp>)
- Smithsonian Institution (US)
(<http://persoon.si.edu/types/>)
- Muséum National d'Histoire Naturelle (P)
(<http://coldb.mnhn.fr/Consultation?catalogue=1>)

Some other institutional herbaria (BM, PRC, B, MA, W, WU, MEL, etc.) hold Cuming's exsiccatae, but their digital catalogues are not accessible via web or contain very few Cuming's specimens.

Bibliographic references for almost all protologues were localised using *International Plant Name Index* (<http://www.ipni.org/>). After that all possible types were checked against protologues in the Moscow University library or in the following digital libraries:

- Botanicus Digital Library
(<http://www.botanicus.org/>)
- Biodiversity Heritage Library

(<http://www.biodiversitylibrary.org/>)

● Internet Archive

(<http://www.archive.org/>)

● Google Books

(<http://books.google.com/>)

● Gallica, Bibliotheque nationale de France digital library

(<http://gallica.bnf.fr/>)

● Biblioteca digital del Real Jardín Botánico de Madrid

(<http://bibdigital.rjb.csic.es/spa/index.php>)

3. List of type specimens

Only basionyms are given, whereas accepted names are omitted. All collections originated from the Philippines; specimens from other places (Malacca, Singapore, Indonesia, and St. Helena) are indicated by a locality name.

Designations in the list:

- * two specimens of different taxa bear the same number
- ** one specimen is a type of two (or three) names
- *** two taxa are based on the same number (heterogeneous collection); taxonomic expertise is needed to decide what taxon is represented in MW

GYMNOSPERMS

Podocarpaceae

Podocarpus cumingii Parl.: *Cuming 803* (syn)

ANGIOSPERMS – MONOCOTYLEDONEAE

Amaryllidaceae

Crinum cumingii Baker: *Cuming 1382* (iso)

Burmanniaceae

Crytonema malaccensis Turcz.: *Cuming 2325* (iso), Malacca

Cyperaceae

Baumea falcata Nees: *Cuming 932* (iso)

Carex bengalensis Roxb. var. *scaberrima* Boeckeler: *Cuming 936* (iso)

Carex cumingiana Steud.: *Cuming 1795*** (iso)

Carex oligostachya Nees: *Cuming 1795*** (iso)

Cyperus anomalus Steud.: *Cuming 1636* (iso)

Cyperus gymnoleptus Steud.: *Cuming 559* (iso)

Cyperus kurrii Steud.: *Cuming 444* (iso)

Cyperus lagorensis Steud.: *Cuming 445* (syn)

Cyperus macrosciadion Steud.: *Cuming 537* (iso)

Cyperus solutus Steud.: *Cuming 676* (iso)

Fimbristylis amblyphylla Steud.: *Cuming 530* (iso)

Fimbristylis philippica Steud.: *Cuming 558* (iso)

Fuirena philippinensis Gand.: *Cuming 1834* (iso)
Isolepis cumingii Steud.: *Cuming 1508* (iso)
Kyllinga albescens Steud.: *Cuming 1418* (iso)
Sorostachys kyllingoides Steud.: *Cuming 1417* (iso)

Dioscoreaceae

Dioscorea luzonensis Schauer: *Cuming 779* (type?)
Dioscorea myriantha Kunth: *Cuming 547* (iso) & *Cuming 547 [err. 347]* (iso) [*Cuming 517*
(a specimen of *Gymnostemma integrifoliola*) is erroneously cited in the protologue]
Dioscorea pyrifolia Kunth var. *ferruginea* Prain et Burkill: *Cuming 2314* (type status
unknown), Malacca
Dioscorea tiliifolia Kunth: *Cuming 781* (iso)
Stenomeris dioscoreifolia Planch.: *Cuming 875* (iso)

Gramineae

Andropogon ischyranthus Steud.: *Cuming 1003* (iso) [*Cuming 1005* (a specimen of
Commersonia platyphylla) is erroneously cited in the protologue]
Andropogon leptanthus Steud.: *Cuming 1400* (iso)
Andropogon obvallatus Steud.: *Cuming 1002* (iso)
Andropogon pedicellatus Steud.: *Cuming 1395* (iso)
Anthistiria vulpina Andersson: *Cuming 1272* (authentic specimen?) [Type is not indicated
in the protologue]
Apluda cumingii Büse ex de Vriese: *Cuming 635* (iso)
Danthonia luzoniensis Steud.: *Cuming 1415* (iso)
Dinochloa scandens (Blume) Kuntze var. *angustifolia* Hack. ex Merr.: *Cuming 637* (syn)
Eleusine polydactyla Steud.: *Cuming 824* (iso)
Eragrostis cumingii Steud.: *Cuming 672* (syn), *Cuming 1104* (syn)
Eragrostis euchroa Steud.: *Cuming 2420* (syn), Singapore (cf. Rolfe 1908)
Eragrostis luzoniensis Steud.: *Cuming 1416* (iso)
Eragrostis spartinoides Steud.: *Cuming 668* (iso)
Holisetum philippicum Steud.: *Cuming 1363* (isolecto), *Cuming 1414* (syn)
Imperata ramosa Andersson: *Cuming 1801*** (iso)
Leptaspis cumingii Steud.: *Cuming 1627* (iso)
Leptaspis manillensis Steud.: *Cuming 1739* (iso)
Miscanthus luzonensis Andersson: *Cuming 787*** (iso – 2)
Ophiuros undatus Nees: *Cuming 1339* (iso)
Panicum acutiglumum Steud.: *Cuming 2287* (iso), Malacca
Panicum adstans Steud.: *Cuming 2288* (iso), Malacca
Panicum amplissimum Steud.: *Cuming 553* (iso?) [*Cuming 583* is probably erroneously
cited in the protologue]
Panicum angustissimum Hochst. ex Steud.: *Cuming 1668* (syn) [Although Cuming's
collection is cited as a syntype, *Kappler 1499* studied by Hochstein is a better choice
for lectotypification]
Panicum auritum C.Presl ex Nees var. *procerius* Nees: *Cuming 1274* (syn)
Panicum calaccanzense Steud.: *Cuming 498* (iso)
Panicum concinnum Nees: *Cuming 2284* (iso), Malacca

- Panicum cumingianum* Steud.: *Cuming 1422* (isolecto) [*Cuming 422* is cited in the protologue as a type probably erroneously.]
Panicum extensum Steud.: *Cuming 2409** (syn), Singapore (cf. Rolfe 1908)
Panicum glumaepatulum Steud.: *Cuming 550* (iso)
Panicum hermaphroditum Steud.: *Cuming 554* (iso)
Panicum leptanthum Steud.: *Cuming 1669* (iso)
Panicum rubiginosum Steud.: *Cuming 551* (iso)
Panicum vacillans Steud.: *Cuming 679* (iso)
Paspalum pluriracemosum Steud.: *Cuming 534* (syn)
Perotis glabrata Steud.: *Cuming 1399* (iso)
Pollinia cumingii Nees: *Cuming 1538* (iso)
Rottboellia denudata Steud.: *Cuming 562* (iso)
Saccharum alopecurus Nees: *Cuming 1801*** (syn) & *Cuming 2411* (syn), Singapore (cf. Rolfe 1908)
Saccharum densum Nees (*S. praegrande* Steud. nom. superfl.): *Cuming 787*** (syn – 2)
Saccharum insulare Brongn. var. *amplum* Andersson: *Cuming 634* (syn)
Saccharum negrosense Steud.: *Cuming 1801*** (iso)
Schizostachyum acutiflorum Munro: *Cuming 544* (isolecto)
Sporobolus verticillatus Nees: *Cuming 545* (iso)
- Orchidaceae
Appendicula xytriophora Rchb. f.: *Cuming 2149* (iso)
Dendrochilum uncatum Rchb. f. var. *lancifolium* Rchb. f.: *Cuming 2103* (iso)
Dendrochilum uncatum Rchb. f.: *Cuming 2073* (iso)
Dissorhynchium muricatum Schauer: *Cuming 2086**** (type?)
Grammatophyllum multiflorum Lindl.: *Cuming 2085* (iso?)
Habenaria aristulifera Rchb. f.: *Cuming 2091**** (iso)
Habenaria cumingii Kraenzl.: *Cuming 2091**** (iso)
Habenaria delessertiana Kraenzl.: *Cuming 2086**** (iso)
Liparis disticha Lindl. var. *latilabris* Finet: *Cuming 2099* (iso)
Spathoglottis tomentosa Lindl.: *Cuming 2108* (iso?)
- Pandanaceae
Freycinetia cumingiana Gaudich.: *Cuming 1455*** (iso)
Freycinetia luzonensis C.Presl: *Cuming 1455*** (iso)
- Potamogetonaceae
Potamogeton mucronatus C.Presl, non Schrad. ex Sonder: *Cuming 1381* (isolecto)
- Zingiberaceae
Alpinia rolfei K. Schum.: *Cuming 1327* (iso)
Globba campsophylla K. Schum.: *Cuming 1390* (iso)
Globba heterobractea K. Schum.: *Cuming 1383* (syn)

ANGIOSPERMS – DICOTYLEDONEAE

- Acanthaceae
Hygrophila assurgens Nees: *Cuming 477* (syn)

Hypoestes laxiflora Nees: *Cuming 1019* (syn)
Justicia luzonensis C.B. Clarke: *Cuming 548* (type status unknown)
Lepidagathis psilantha Nees: *Cuming 1013* (syn)
Peristrophe cumingiana Nees: *Cuming 1015* (syn)
Ruellia cumingiana Nees: *Cuming 1310* (isolecto)
Ruellia rhytiphylla Nees: *Cuming 1016* (syn)

Actinidiaceae

Saurauia cumingiana de Vriese: *Cuming 944*** (type?) & *Cuming 1302*** (type?)
Saurauia exasperata de Vriese: *Cuming 455* (iso)
Saurauia latibractea Choisy: *Cuming 944*** (syn) & *Cuming 1302*** (syn)
Saurauia rugosa Turcz.: *Cuming 922* (iso)

Amaranthaceae

Deeringia indica Zoll. ex Moq., non Retz. ex Blume: *Cuming 467* (syn)

Anacardiaceae

Buchanania florida Schauer var. *cumingii* Engl.: *Cuming 1115* (syn)
Buchanania microphylla Engl.: *Cuming 1125** (iso)
Comeurya cumingiana Baill.: *Cuming 1700* (iso – 2)
Semecarpus philippinensis Engl.: *Cuming 1146* (iso)

Annonaceae

Anaxagorea zeylanica Hook. f. et Thomson: *Cuming 831* (syn)
Artabotrys cumingianus S. Vidal: *Cuming 970* (iso) [Gubanov (2002) cites this specimen as an isolectotype]
Artabotrys rolfei S. Vidal: *Cuming 1099* (syn) & *Cuming 1495* (syn)
Meiogyne paucinervia Merr.: *Cuming 1738* (para)
Melodorum fulgens [Wall. ex] Hook. f. et Thomson: *Cuming 2340* (syn), Malacca
Melodorum manubriatum [Wall. ex] Hook. f. et Thomson: *Cuming 2339* (syn), Malacca [Gubanov (2002) erroneously refers this specimen to *Uvaria manubriata* Hook. f. et Thomson]
Orophea cumingiana S. Vidal: *Cuming 854* (isolecto) & *Cuming 1412* (syn) [Gubanov (2002) cites *Cuming 854* as a syntype]
Phaeanthus cumingii Miq.: *Cuming 525* (isolecto) [Gubanov (2002) cites this specimen as a syntype] & *Cuming 1084* (syn)
Polyalthia cumingiana Merr.: *Cuming 827* (iso)
Polyalthia lanceolata S. Vidal: *Cuming 450* (syn)

Apocynaceae

Aganosma velutina A. DC.: *Cuming 1803* (iso)
Ecdysanthera schrieckii Van Heurck et Müll. Arg.: *Cuming 910* (iso)
Kopsia pilosa A. DC.: *Cuming 1783** (iso)
Melodinus cumingii A. DC.: *Cuming 1831* (iso)
Parameria philippinensis Radlk.: *Cuming 1126* (iso)
Rauvolfia amsoniifolia A. DC.: *Cuming 1133* (syn) & *Cuming 1249* (isolecto)
Strophanthus cumingii A. DC.: *Cuming 1228* (iso)
Tabernaemontana cumingiana A. DC.: *Cuming 604* (iso)

Wrightia ovata A.DC.: *Cuming 1279* (syn)

Aquifoliaceae

Ilex cumingiana Rolfe: *Cuming 1241* (iso)

Araliaceae

Aralia hypoleuca C.Presl: *Cuming 792* (syn) & *Cuming 920* (isolecto)

Asclepiadaceae

Ceropegia cumingiana Decne.: *Cuming 447* (iso)

Heterostemma cuspidatum Decne.: *Cuming 1449* (iso)

Pergularia angustiloba Warb.: *Cuming 1334* (iso)

Secamone attenuata Decne.: *Cuming 1536* (iso)

Secamone multiflora Decne.: *Cuming 1284* (iso)

Streptocaulon obtusum Turcz.: *Cuming 697* (iso)

Triplolepis cumingii Turcz.: *Cuming 1024* (iso) [*Cuming 1025* (a specimen of *Gnaphalium luteo-album*) is erroneously cited in the protologue]

Begoniaceae

Begonia quercifolia A.DC.: *Cuming 1696* (iso)

Begonia rhombicarpa A.DC.: *Cuming 510* (iso)

Petermannia cumingiana Klotzsch: *Cuming 856* (iso)

Bixaceae

Hisingera grandifolia Turcz.: *Cuming 771* (iso)

Boraginaceae

Cordia blancoi S.Vidal: *Cuming 1202* (syn)

Cordia cumingiana S.Vidal: *Cuming 1012* (syn)

Ehretia philippinensis A.DC.: *Cuming 1484** (syn)

Burseraceae

Garuga mollis Turcz.: *Cuming 960* & *Cuming 1235* (authentic specimens?) [Type is not indicated in the protologue]

Marignia nitida Turcz.: *Cuming 1152* (iso)

Capparaceae

Capparis lasiopodia Turcz.: *Cuming 955* (iso – 2)

Capparis luzonensis Turcz.: *Cuming 1201* (iso)

Roydsia philippinensis Turcz.: *Cuming 541* (iso)

Caprifoliaceae

Viburnum luzonicum Rolfe: *Cuming 1345* (iso)

Cecropiaceae

Conocephalus acuminatus Trécul: *Cuming 755** (iso)

Celastraceae

Celastrus polybotrys Turcz.: *Cuming 1324* (iso)

Chrysobalanaceae

Grymania salicifolia C.Presl: *Cuming 1057* (iso)

Clethraceae

Clethra lancifolia Turcz.: *Cuming 855* (iso) [*Lobb 449* from Singapore cited in the protologue is described by Turczaninow as a distinct unnamed variety]

Clusiaceae

Ancistrolobus floribundus Turcz.: *Cuming 492* (syn) & *Cuming 965* (syn) [*Cuming 792* (a specimen of *Aralia hypoleuca*) is erroneously cited in the protologue]

Calophyllum cumingii Planch. et Triana: *Cuming 1077* (iso)

Calophyllum pseudotacamahaca Planch. et Triana: *Cuming 1047* (iso)

Combretaceae

Pentaptera mollis C.Presl: *Cuming 1004* (iso)

Compositae

Bidens denudata Turcz.: *Cuming 1375* (iso)

Conyza tetraptera Turcz.: *Cuming 988* (iso)

Eclipta philippinensis Gand.: *Cuming 2436* (syn), Sumatra

Gynura affinis Turcz.: *Cuming 926* (iso)

Pharetranthus ferrugineus Klatt: *Cuming 2454* (iso), St. Helena

Spilanthes grandiflora Turcz.: *Cuming 1154* (iso)

Connaraceae

Anisostemon trifolius Turcz.: *Cuming 851*** (iso)

Connarus polyanthus Planch.: *Cuming 851*** (iso)

Rourea heterophylla Planch.: *Cuming 752* (iso)

Rourea multiflora Planch.: *Cuming 949* (syn)

Convolvulaceae

Erycibe sargentii Merr.: *Cuming 1071* (para)

Crypteroniaceae

Henslowia cumingii Planch.: *Cuming 1376* (iso) [Type number is not indicated in the protologue, but this species was collected by Cuming only once]

Cucurbitaceae

Gynostemma integrifolium Cogn.: *Cuming 767* (syn)

Dichapetalaceae

Chailletia benthamiana Turcz.: *Cuming 1192* (iso)

Dipterocarpaceae

Antherotriche lanceolata Turcz.: *Cuming 882* (iso)

Hopea squamata Turcz.: *Cuming 883* (iso)

Ebenaceae

Diospyros philippinensis A.DC.: *Cuming 1142* (iso)

Maba cumingiana A.DC.: *Cuming 1694* (iso)

Elaeagnaceae

Elaeagnus cumingii Schlecht.: *Cuming* 460 (iso)

Elaeocarpaceae

Elaeocarpus cumingii Turcz.: *Cuming* 807 (iso – 2)

Elaeocarpus nitidus sensu Turcz., non Jack: *Cuming* 893 (iso)

Monocera macrocera Turcz.: *Cuming* 2331 (iso), Malacca

Elatinaceae

Bergia glandulosa Turcz.: *Cuming* 1058 (iso)

Ericaceae

Gaultheria cumingiana S.Vidal: *Cuming* 934 (syn)

Rhododendron quadrasianum S.Vidal: *Cuming* 804 (syn)

Vaccinium caudatum Warb.: *Cuming* 905 (isolecto)

Vaccinium cumingianum S.Vidal: *Cuming* 805 (syn)

Vaccinium philippinense Warb.: *Cuming* 832 (iso)

Euphorbiaceae

Acalypha grandis Benth. var. *velutina* Müll. Arg.: *Cuming* 1159 (iso)

Acalypha stipulacea Klotzsch: *Cuming* 621 (type?)

Adenocrepis tetrandra Baill.: *Cuming* 982 (isolecto)

Alchornea javensis Müll. Arg.: *Cuming* 756 (syn)

Andrachne australis Zoll. et Moritzi var. *angustifolia* Müll. Arg.: *Cuming* 1528 (iso)

Antidesma barbatum C.Presl: *Cuming* 1246 (isolecto)

Antidesma ciliatum C.Presl: *Cuming* 1446 (iso)

Antidesma cordifolium C.Presl: *Cuming* 474 (iso)

Antidesma leptocladum Tul.: *Cuming* 1513 (isolecto)

Antidesma nitidum Tul.: *Cuming* 1511 (isolecto)

Antidesma salicifolium C.Presl: *Cuming* 1316 (iso)

Antidesma vestitum C.Presl: *Cuming* 986 (iso)

Breynia cernua Müll. Arg. var. *acutifolia* Müll. Arg.: *Cuming* 1103 (syn)

Claoxylon rubescens Miq. var. *cumingiana* Müll. Arg.: *Cuming* 598 (iso)

Croton cumingii Müll. Arg.: *Cuming* 1384 (syn)

Croton leiophyllus Müll. Arg.: *Cuming* 998 (syn) & *Cuming* 1075 (syn)

Croton luzoniensis Müll. Arg.: *Cuming* 1136 (iso)

Croton verreauxii Baill. var. *angustifolius* Müll. Arg.: *Cuming* 736 (syn)

Cyclostemon cumingii Baill.: *Cuming* 1695 (iso)

Glochidion eleutherostylum Müll. Arg.: *Cuming* 509 (iso)

Macaranga bicolor Müll. Arg.: *Cuming* 1301 (iso)

Macaranga cumingii Müll. Arg.: *Cuming* 1100 (iso)

Mallotus cardiophyllus Merr.: *Cuming* 1267 (iso)

Mallotus cumingii Müll. Arg.: *Cuming* 798 (iso)

Melanthesa acuminata Müll. Arg.: *Cuming* 1543 (iso)

Phyllanthus pubescens Klotzsch, non Moon, nec Wall.: *Cuming* 595 [err. 596] (syn)

[Labels of *Cuming* 595 and *Cuming* 596 (*Elephantopus spicatus* Juss., Compositae) were mixed in MW during mounting]

Scepa aurita Tul.: *Cuming* 860 (iso)

Stipellaria villosa Benth.: *Cuming* 2307 (isolecto), Malacca

Trigonostemon cumingii Müll. Arg.: *Cuming 1693* (iso)

Flacourtiaceae

Casearia cinerea Turcz.: *Cuming 1011* (iso)

Xylosma cumingii Clos.: *Cuming 1123* [err. 1125] (syn♀) & *Cuming 1250* (syn♂)

Geraniaceae

Connaropsis monophylla Planch. ex Hook. f.: *Cuming 2324* (syn?), Malacca

Gesneriaceae

Epithema brunonis Decne. var. *fasciculata* C.B. Clarke: *Cuming 823* (syn)

Icacinaceae

Platea laxiflora Miers: *Cuming 891* (syn)

Stemonurus cumingianus Miers: *Cuming 796* (iso)

Juglandaceae

Engelhardtia parvifolia C.DC.: *Cuming 1329* (iso)

Labiatae

Callicarpa cumingiana Schauer: *Cuming 1707* (iso)

Callicarpa dolichophylla Merr.: *Cuming 1330* (iso)

Callicarpa erioclona Schauer: *Cuming 911* (syn)

Callicarpa micrantha S.Vidal: *Cuming 1165* (syn)

Clerodendrum brachyanthum Schauer: *Cuming 816* (iso)

Clerodendrum macrostegium Schauer: *Cuming 1541* (syn)

Geunsia hookeri Merr.: *Cuming 1773* (iso)

Gomphostemma philippinarum Benth.: *Cuming 1840* (iso)

Pogostemon velatus Benth.: *Cuming 1097* (iso)

Premna adenosticta Schauer: *Cuming 1230* (iso)

Premna cumingiana Schauer: *Cuming 778* (syn)

Premna philippinensis Turcz.: *Cuming 1172* (syn)

Sczegliewia luconensis Turcz.: *Cuming 648* (iso?) [Turczaninow cited *Cuming 13* (coll. suppl. 1839) in the protologue, but probably *Cuming 648* is the same collection]

Tectona philippinensis Benth. et Hook. f. ex Merr.: *Cuming 1432* (iso)

Lauraceae

Tetranthera perrottetii Blume var. *cumingii* Meisn.: *Cuming 1473* (iso)

Tetranthera perrottetii Blume var. *subcordata* Meisn.: *Cuming 1643* (iso)

Leguminosae

Albizia retusa Benth.: *Cuming 1223* (isolecto)

Bauhinia nymphaeifolia Perkins: *Cuming 1181* (iso) [*Cuming 1180* (a specimen of *Eugenia*, Myrtaceae) is cited erroneously in the protologue]

Bauhinia pinchotiana Perkins: *Cuming 1119* (iso)

Cynometra simplicifolia Harms: *Cuming 1134* (iso)

Dalbergia cumingiana Benth.: *Cuming 1244* (iso)

Dendrolobium cumingianum Benth.: *Cuming 1454** (iso)

Derris cumingii Benth.: *Cuming 1208* (iso)

Liparia badocana Blanco: *Cuming 1149*** (isoneo)
Meladenia densiflora Turcz.: *Cuming 1149*** (isolecto)
Phanera cumingiana Benth.: *Cuming 1785* (iso) [*Cuming 1789* (a specimen of *Momordica cochinchinensis*) is cited erroneously in the protologue]
Pithecellobium subacutum Benth.: *Cuming 502* (iso)
Tephrosia vestita Vogel: *Cuming 1621* (iso?)

Lentibulariaceae

Utricularia brevicaulis Benj.: *Cuming 2289* (iso), Malacca

Loganiaceae

Geniostoma cumingianum Benth.: *Cuming 864* (syn)
Strychnos multiflora Benth.: *Cuming 695* (syn)

Loranthaceae

Amylothea cumingii Tiegh.: *Cuming 1969* (iso)
Canopus luzonensis C.Presl: *Cuming 1195* (syn)
Helicia cumingiana C.Presl: *Cuming 1262* (iso)
Helicia loranthoides C.Presl: *Cuming 858* (iso)
Lantheros spicifer C.Presl: *Cuming 1949* (iso)
Loranthus confusus Merr.: *Cuming 1959* (iso)
Loranthus loheri Merr.: *Cuming 1955* (para) & *Cuming 1965* (para)
Loranthus merrittii Merr.: *Cuming 1952* (iso)
Loranthus mirabilis Van Heurck et Müll. Arg.: *Cuming 1966*** (iso)
Stemmatophyllum cumingii Tiegh.: *Cuming 1966*** (iso)
Viscum cumingianum C.Presl: *Cuming 1968* (iso)

Lythraceae

Pterocalymma paniculata Turcz.: *Cuming 1188* (iso)

Magnoliaceae

Magnolia philippinensis P.Parm.: *Cuming 783*** (iso)
Michelia parviflora Merr.: *Cuming 783*** (iso)

Malpighiaceae

Hiptage cumingii Merr.: *Cuming 971* (iso)
Ryssopterys dealbata A.Juss.: *Cuming 1775* (iso)
Ryssopterys ovata Turcz.: *Cuming 941* (iso) [*Cuming 944* (a specimen of *Saurauia latibractea*) is cited in the protologue as a type erroneously.]

Malvaceae

Hibiscus campylosiphon Turcz.: *Cuming 1063* (iso)
Malachra lineariloba Turcz.: *Cuming 1111* (iso)
Pavonia rubiformis Turcz.: *Cuming 469* (iso – 2)
Sida cumingii Gand.: *Cuming 721* (iso)
Sida philippinensis Gand.: *Cuming 748* (iso)

Melastomataceae

Astronia cumingiana S.Vidal: *Cuming 999* (syn)

Medinilla astronoioides Triana: *Cuming* 758 (iso – 2)
Medinilla cogniauxii Merr.: *Cuming* 1487* (syn)
Medinilla myrtiformis Triana: *Cuming* 753 (iso)
Melastoma homostegium Naudin: *Cuming* 927 (iso – 2)
Memecylon cumingianum C.Presl: *Cuming* 917 (iso)
Memecylon cumingii Naudin ('*cumingii*'): *Cuming* 760** (iso) [Type number is not indicated in the protologue, but this species was collected by Cuming only once]
Memecylon lucidum C.Presl: *Cuming* 1445 (iso)
Memecylon umbellatum C.Presl: *Cuming* 760** (iso)
Sonerila heterostema Naudin: *Cuming* 2349 (iso), Malacca

Meliaceae

Aglaiia turczaninowii C.DC.: *Cuming* 772 (isolecto)
Dasycoleum philippinum Turcz.: *Cuming* 683 (iso)
Hartighsea cauliflora Turcz.: *Cuming* 1411 (iso)

Moraceae

Artocarpus nitidus Trécul: *Cuming* 1078 & *Cuming* 1081 (types?)
Covellia cuneata Miq.: *Cuming* 1938 (iso)
Covellia microcarpa Miq.: *Cuming* 1939 (iso)
Ficus acuminatissima Miq.: *Cuming* 1928 (iso)
Ficus macropoda Miq.: *Cuming* 1933 (iso)
Ficus pedunculosa Miq.: *Cuming* 1941 (authentic specimen) [Type is not indicated in the protologue, but this species was collected by Cuming only once. A drawing in the protologue is another possibility for lectotypification]
Ficus philippinensis Miq.: *Cuming* 1937 (iso)
Ficus sinuosa Miq.: *Cuming* 1921 (iso)
Uromorus philippinensis Bureau: *Cuming* 919 (iso)
Urostigma caulocarpum Miq.: *Cuming* 1930 (iso)
Urostigma concinnum Miq.: *Cuming* 1940 (iso)
Urostigma nuda Miq.: *Cuming* 1932 (iso)
Urostigma parvifolium Miq.: *Cuming* 1935 (iso)

Myristicaceae

Myristica ardisiifolia A.DC.: *Cuming* 1702 (iso)
Myristica bracteata A.DC.: *Cuming* 1481 (syn)
Myristica farquhariana Wall. ex Hook. f. et Thomson: *Cuming* 901** (syn)
Myristica paniculata A.DC.: *Cuming* 901** (iso) [De Candolle indicated in the protologue: "*M. farquhariana* Hook. f. et Th. partim"]

Myrsinaceae

Ardisia cumingiana A.DC.: *Cuming* 1155 (iso)
Ardisia disticha A.DC.: *Cuming* 849 (iso)
Badula philippinensis A.DC.: *Cuming* 1385 (iso)
Maesa indica (Roxb.) A.DC. var. *obtusata* A.DC.: *Cuming* 602 (iso)
Maesa indica (Roxb.) A.DC. var. *wightiana* A.DC.: *Cuming* 983 (syn)
Maesa philippinensis Gand.: *Cuming* 2286 (iso), Malacca
Myrsine philippensis A.DC.: *Cuming* 868 (iso)

Myrtaceae

- Baeckea cumingiana* Schauer ('*cumingeana*'): *Cuming* 2269 (iso), Malacca
Botryorhiza luzonensis C.Presl: *Cuming* 653 (iso)
Decaspermum blancoi S.Vidal: *Cuming* 801 (syn)
Eugenia acuminatissima (Blume) Kurz var. *parva* Merr.: *Cuming* 861 (syn)
Eugenia cumingiana S.Vidal: *Cuming* 925 (syn)
Eugenia loheri C.B.Rob.: *Cuming* 1388 (para)
Eugenia paucivenia C.B.Rob.: *Cuming* 1186 (iso)
Eugenia subrotundifolia C.B.Rob.: *Cuming* 1251 (syn)
Terminalia nitens C.Presl: *Cuming* 1326 (iso)
Terminalia parviflora C.Presl: *Cuming* 1439 (iso)
Terminalia pellucida C.Presl: *Cuming* 1039 (iso)
Terminalia polyantha C.Presl: *Cuming* 1516 (iso)

Olacaceae

- Lavallea philippinensis* Baill.: *Cuming* 848 (iso)

Oleaceae

- Jasminum luzoniense* S.Vidal: *Cuming* 1029 (syn)
Ligustrum cumingianum Decne.: *Cuming* 1213 (syn)
Linociera cumingiana S.Vidal: *Cuming* 972 (syn)

Opiliaceae

- Opilia cumingiana* Baill.: *Cuming* 1129 (iso)

Oxalidaceae

- Oxalis cumingiana* Turcz.: *Cuming* 494 (iso)

Piperaceae

- Chavica corylistachya* Miq.: *Cuming* 1044 (iso)
Piper cumingianum Miq.: *Cuming* 1190 (iso)
Piper officinarum C.DC.: *Cuming* 1248 (syn)
Piper philippinense C.DC.: *Cuming* 485 (iso)
Piper rhombophyllum C.DC.: *Cuming* 834 (syn) [*Cuming* 8341 is erroneously cited in the protologue]
Rhyncholepis brevicuspis Miq.: *Cuming* 1843 (syn)

Pittosporaceae

- Pittosporum brachysepalum* Turcz.: *Cuming* 1427 (syn)

Polygalaceae

- Securidaca corymbosa* Turcz.: *Cuming* 1031** (iso)
Securidaca cumingii Hassk.: *Cuming* 1031** (iso)

Polygonaceae

- Polygonum lanigerum* R.Br. var. *indicum* Meisn.: *Cuming* 1377 (type?)
Polygonum roxburghii Meisn. var. *spathulatum* Meisn.: *Cuming* 1289 (syn)

Rosaceae

- Pygeum glandulosum* Merr.: *Cuming* 797 (syn)

Rubus vidualii Focke: *Cuming* 750 (iso)

Rubiaceae

Canthium villarii S.Vidal: *Cuming* 886 (syn) & *Cuming* 1527 (syn)

Cymelonema memecyloides C.Presl: *Cuming* 1678 (iso)

Ixora cumingiana S.Vidal: *Cuming* 1233 (syn)

Nauclea cumingiana S.Vidal: *Cuming* 833 (isolecto)

Nauclea gracilis S.Vidal: *Cuming* 835 (iso)

Oldenlandia horneriana Miq.: *Cuming* 974 (iso)

Pavetta cumingii Bremek.: *Cuming* 1322 (iso)

Pavetta parvifolia S.Vidal: *Cuming* 1394 (syn)

Randia cumingiana S.Vidal: *Cuming* 1366 (isolecto)

Uncaria florida S.Vidal: *Cuming* 1504 (isolecto)

Uncaria velutina Haviland: *Cuming* 1503 (iso) [*Cuming* 503 (a specimen of *Sterculia ferruginea*) is erroneously cited in the protologue]

Villaria rolfei S.Vidal: *Cuming* 1271 (iso)

Webera luzoniensis S.Vidal: *Cuming* 1323 (iso)

Rutaceae

Lasiolepis paucijuga Benn.: *Cuming* 1150 (iso)

Micromelum tephrocarpum Turcz.: *Cuming* 597 (iso)

Rabelaisia philippinensis Planch.: *Cuming* 1512 (syn)

Sclerostylis nitida Turcz.: *Cuming* 1598 (iso)

Toddalia ambigua Turcz.: *Cuming* 1010 (iso)

Toddalia effusa Turcz.: *Cuming* 483 (iso) [*Cuming* 438 (a specimen of *Indigofera anil*) is cited erroneously in the protologue]

Sapindaceae

Allophylus dasythyrsus Radlk.: *Cuming* 1332 (iso)

Allophylus macrostachys Radlk.: *Cuming* 826 (syn)

Lachnometalum glabrum Turcz.: *Cuming* 1169 (iso)

Mischocarpus fuscescens Blume: *Cuming* 1734 (type?)

Sapindus cinereus Turcz.: *Cuming* 1131 (isolecto)

Sapindus cultratus Turcz.: *Cuming* 1304 (iso)

Schleichera revoluta Turcz.: *Cuming* 1387 (iso)

Schleichera subundulata Turcz.: *Cuming* 507 (iso) [This collection is cited twice in the protologue – correctly as *Cuming* 507 and erroneously as *Cuming* 567]

Schmidelia grossedentata Turcz.: *Cuming* 640 (iso)

Schmidelia obovata A. Gray: *Cuming* 1502 (syn)

Zygolepis rufescens Turcz.: *Cuming* 1761 (iso)

Sapotaceae

Sapota parvifolia A.DC.: *Cuming* 1147 (iso)

Sterculiaceae

Sczegliewia involucrata Turcz. [var. α]: *Cuming* 1022 (iso)

Sterculia cuneata R.Br.: *Cuming* 784 (iso)

Sterculia ferruginea R.Br.: *Cuming* 503 (iso)

Sterculia stipularis R.Br.: *Cuming 1143* (iso)

Symplocaceae

Symplocos floridissima Brand: *Cuming 1305* (iso)

Tiliaceae

Colona subaequalis [Planch. ex] Burret: *Cuming 1534* (iso)

Columbia inaequilatera Turcz.: *Cuming 1660* (syn)

Diplodiscus paniculatus Turcz.: *Cuming 1686* (iso)

Grewia eriopoda Turcz.: *Cuming 1680* (iso)

Thymelaeaceae

Gyrinopsis cumingiana Decne.: *Cuming 1617* (iso)

Wikstroemia ovata C.A.Mey.: *Cuming 458* (iso)

Ulmaceae

Aphananthe philippinensis Planch.: *Cuming 1311* (iso)

Gironniera celtidifolia Gaudich.: *Cuming 870* (iso)

Sponia blancoi Planch.: *Cuming 1671* (type status unknown)

Sponia glabrescens Planch.: *Cuming 1614* (iso)

Sponia velutina Planch.: *Cuming 1232* (syn)

Urticaceae

Cypholophus macrocephalus Wedd.: *Cuming 1839* (type status unknown)

Elatostema brongiartianum Wedd.: *Cuming 629**** (iso)

Elatostema glaucescens Wedd.: *Cuming 629**** (syn?)

Elatostema longifolium Wedd.: *Cuming 456* (iso)

Elatostema obovatum Wedd.: *Cuming 628* (syn)

Elatostema podophyllum Wedd.: *Cuming 789* (iso)

Gonostegia oppositifolia Turcz.: *Cuming 1391* (iso)

Laportea crenulata Gaud. var. *luzoniensis* Wedd.: *Cuming 522* (syn)

Maoutia platystigma Wedd.: *Cuming 1441* (iso)

Pipturus asper Wedd.: *Cuming 724* (syn?)

Villebrunea trinervis Wedd.: *Cuming 777* (iso)

Violaceae

Pentaloba fasciculata Turcz.: *Cuming 1074* (iso)

Vitaceae

Vitis cumingiana Turcz.: *Cuming 1173* (iso)

Zygophyllaceae

Tribulus macranthus Hassk.: *Cuming 710* (iso)

PTERIDOPHYTA
(not listed by Bobrov & Gubanov 1979)

Dryopteridaceae

Nephrodium oreopteris Fée: *Cuming* 48 (iso)

Lycopodiaceae

Lycopodium casuarinoides Spring: *Cuming* 2346 (iso), Malacca

Polypodiaceae

Leptochilus subquinquefidus Fée: *Cuming* 3 (iso)

Polypodium oodes Kunze: *Cuming* 58 (type status unknown)

In addition to types, the following 365 non-type Cuming's collections from the Philippines are present in Moscow University Herbarium (numbers correspond to those in Vidal y Soler (1885)): *Cuming* 436*, 437, 438, 439, 440, 442, 446, 448, 449, 451, 452, 454, 457, 459, 461, 462, 464, 465, 468, 470, 475, 486, 487, 490, 491, 493, 495, 497, 499*, 504, 505, 508, 512, 518, 519, 523, 524, 529, 531, 533 [err. 532], 538, 539, 542, 546, 549, 555, 557, 560, 561, 563, 565, 566, 575, 577, 578, 580, 582, 582, 584, 586, 587, 591, 596 [err. 595], 605, 606, 610, 612, 614, 622, 623, 624, 625, 626, 627, 630, 631, 632, 633, 643, 646, 649*, 650, 651, 654, 656, 657, 658, 659, 661, 662, 665, 666, 667, 674, 680, 681, 698, 699, 700, 701, 706, 708, 709, 712, 713, 714, 716, 719, 722, 723, 729, 732, 741, 742, 743, 744, 746, 747, 749, 773, 775, 776, 782, 788, 790, 791, 799, 810, 817, 820, 825, 828, 841, 843, 844, 845, 847, 850, 852, 853, 866, 867, 869, 887, 899, 916, 923, 929, 937, 948, 952, 957, 961, 962, 963, 975, 980, 981, 989, 990, 993, 995, 1000, 1005, 1007, 1014, 1020, 1023, 1028, 1034, 1037, 1038, 1040, 1041, 1043, 1051, 1061, 1064, 1066, 1067, 1069, 1072, 1073, 1079, 1083, 1086, 1090, 1091, 1093, 1096, 1102, 1107, 1108, 1110, 1113, 1116, 1121, 1124, 1130, 1132, 1138, 1139, 1141, 1148, 1160, 1161, 1162, 1164, 1174, 1177, 1179, 1183, 1183, 1184, 1189, 1191, 1194, 1198, 1199*, 1206, 1207, 1209, 1211, 1215, 1218, 1219, 1222, 1227, 1236, 1245, 1252, 1253, 1254, 1255, 1257, 1263, 1264, 1269, 1273, 1277, 1281, 1283, 1287, 1288, 1290, 1291, 1298, 1303, 1309, 1312, 1314, 1317, 1318, 1335, 1337, 1340, 1341, 1342, 1347, 1349, 1350, 1352, 1355, 1356, 1365, 1367, 1368, 1371, 1389, 1397, 1401, 1407, 1419, 1420, 1421, 1428, 1433, 1437, 1438, 1440, 1443, 1451, 1461*, 1491, 1493, 1499, 1510, 1514, 1515, 1519, 1520, 1523, 1524, 1525, 1530, 1535, 1544, 1546, 1547, 1589, 1590, 1591, 1594, 1615, 1616, 1619, 1620, 1629, 1640, 1641, 1644, 1645, 1648, 1649, 1650, 1654, 1655, 1656, 1662, 1663, 1665, 1666, 1667, 1670, 1677, 1679, 1684, 1698, 1699, 1701, 1724, 1740, 1754, 1770, 1776, 1781, 1786, 1798, 1804, 1807, 1810, 1830, 1842, 1846, 1847, 1857, 1922, 1923, 1926, 1931, 1934, 1936, 1942, 1947, 1948, 1950, 1951, 1961, 1963, 1964, 2067, 2076, 2084, 2115, 2121. Also 38 non-type Cuming's collections originated from Malacca, Singapore, and Indonesia.

There are also 57 specimens, which I failed to attribute properly. The numbers of these specimens seem to be completely incorrect (not corresponding to those in Vidal y Soler (1885)): *Cuming* 111, 417, 418, 436, 499, 514, 533, 552, 649, 727, 755, 943, 966, 992, 1045, 1166, 1199, 1200, 1225, 1242, 1452, 1453, 1454, 1456, 1457, 1461, 1462, 1462, 1463, 1464, 1467, 1468, 1470, 1472, 1474, 1476, 1477, 1478, 1479, 1480, 1480, 1481, 1485, 1487, 1540, 1630, 1658, 1740, 1767, 1471*, 1471*, 1482*, 1482*, 1484*, 1484*, 1783, 1902.

49 Cuming's specimens in MW bear no numbers.

4. Discussion

It was the time of a rapid progress in European descriptive plant taxonomy in the middle of 19th century, a time when new species were described in thousands upon equatorial and tropical collections. Numerous Cuming's specimens appeared in Europe in late 1830s. First protologues of new Asian species based upon his collections were printed in the end of 1841. Cuming's collections were actively used by authors of later volumes of De Candolle's *Prodromus*, studied and cited by taxonomists in monographs and articles until E.D. Merrill's and C.B. Robinson's publications of mid-1910s. At that time nearly a half of taxa in Cuming's herbarium were described as new to science. Many species were named after the collector.

Due to extensive distribution of duplicates some species were described independently upon the same type specimens. That is why a single Cuming's specimen could be an isotype or/and syntype of two taxa which are not nomenclatural synonyms. For instance, *Cuming 760* (MW) is an isotype both for *Memecylon cumingii* Naudin ('*cumingii*'), Ann. Sci. Nat., Bot. sér. 3, 18: 273. 1852, and *M. umbellatum* C.Presl, Epimel. Bot.: 208. 1851, non Burm. f. 1768 (= *M. preslianum* Triana, Trans. Linn. Soc. London 28(1): 157. 1872). There are almost a dozen of similar cases.

All in all, MW holds 420 type specimens collected by Cuming in SE Asia and typifying 395 taxa, 403 non-type specimens and 106 specimens of unknown status – 57 with incorrect numbers and 49 without numbers (all this figures exclude pteridophytes studied by Bobrov & Gubanov (1979)). There are type specimens of the following ranks – 271 isotypes, 5 possible isotypes, 22 isolectotypes, 1 isoneotype, 5 paratypes, 96 syntypes, 3 possible syntypes, 4 types of unknown rank, 9 possible types, 1 authentic specimen, and 3 possible authentic specimens.

Specimens with incorrect numbers were traced independently in MW and previously in LE (A. Sennikov, pers. comm.). These specimens fit neither Vidal's list nor databased duplicates in European and American herbaria. It is impossible to decide with certainty when this mislabelling occurred, but I guess it was before shipping of Cuming's collection to the Society. Undoubtedly these specimens are representing the Philippine flora and were collected by Cuming. Many of them are obscure types (mislabelled duplicates of type collections), and taxonomic expertise is needed to identify their correct status.

5. Contribution to MW type collection

Gubanov et al. in Balandin (2006) counted 3990 type specimens of 2787 taxa in MW. The majority of taxa originated from Russia (593 taxa), Turkey (215), Kazakhstan (200+), Georgia (86), New Zealand (79), Mongolia (73), Uzbekistan (71), etc. There were ca. 4100 specimens in MW type collection at the end of 2009, just before the incorporation of Cuming's collection. Now MW is known to possess types of 375 taxa described from the Philippines (second rank in MW type collection after Russia). Almost 10% of our type specimens were collected by Cuming in SE Asia.

Gubanov et al. in Balandin (2006) also listed those taxonomists, whose novelties were based on types housed in MW. This list should be expanded with some classics of botany who described Cuming's plants as new to science. They are Nicolai Stepanovitch Turczaninow (57 taxa), Ernst Gottlieb von Steudel (41), Karel Bořivoj Presl (24), Sebastian

Vidal y Soler (24), Alphonse Pyramus de Candolle (22), Johannes Müller Argoviensis (17), Elmer Drew Merrill (16), Friedrich Anton Wilhelm Miquel (16), Christian Gottfried Daniel Nees von Esenbeck (15), Jules Émile Planchon (12), George Bentham (11), Hugh Algernon Weddell (10), etc.

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