Topic 03
The Code

I. Introduction

A. The International Code of Nomenclature for Algae, Fungi, and Plants (ICN)

1. **What**

I. Introduction

A. The International Code of Nomenclature for Algae, Fungi, and Plants (ICN)

1. What
2. **Main Goal**

I. Introduction

A. The International Code of Nomenclature for Algae, Fungi, and Plants (ICN)

1. What
2. **Main Goal**

I. Introduction

A. The International Code of Nomenclature for Algae, Fungi, and Plants (ICN)

1. What
2. Main Goal
3. **Revisionary Process**

I. Introduction

A. The International Code of Nomenclature for Algae, Fungi, and Plants (ICN)

1. What
2. Main Goal
3. Revisionary Process
4. **Six Principles**

I. Introduction

a. Independence from other codes.

Victoria
Amazon water-lily

Victoria
Moth

I. Introduction

Cola
Cola beans

Cola
Moth

I. Introduction

Pieris
Pieris in Blueberry Family

Pieris
Butterfly

I. Introduction

Octolobus
Small trees from W Africa
Cacao Family

Octolobus
Pallas Cat from C & N Asia
Cat Family

I. Introduction

Ficus
Figs

Ficus
sea snail gastropods

I. Introduction

Ficus variegata Blume
Fig

photo by WingKLee

Ficus variegata Roding, 1798
True Fig Shell

Photo by H. Zell

I. Introduction

Ficus ficus
Sea snail

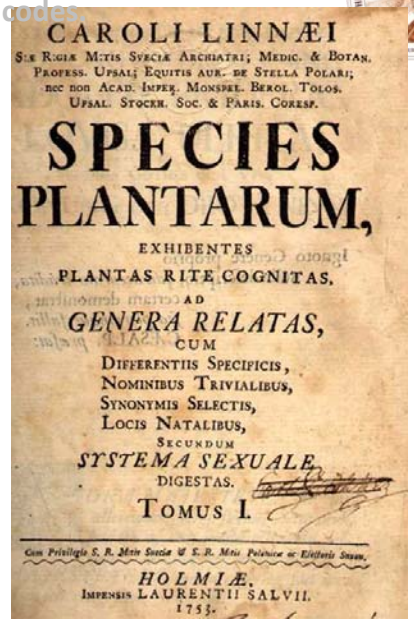
Gorilla gorilla
Gorilla

I. Introduction

a. Independence from other codes.
b. The Type Method

I. Introduction

a. Independence from other codes.
b. The Type Method
c. Priority


CAROLI LINNÆI
SUE REGIÆ MITIS SVECIÆ ARCHIATRI; MEDIC. & BOTAN. PROFESS. UPSAL; EQUITIS AUR. DE STELLA POLARI; NEC NON ACAD. IMPER. MONSPEL. BEROL. TOLOS. UPSAL. STOCKH. SOC. & PARIS. CORESP.

SPECIES PLANTARUM,

EXHIBENTES
PLANTAS RITE COGNITAS,
AD
GENERA RELATAS,
CUM
DIFFERENTIIS SPECIFICIS,
NOMINIBUS TRIVIALIBUS,
SYNONYMIS SELECTIS,
LOCIS NATALIBUS,
SECUNDUM
SYSTEMA SEXUALE
DIGESTAS.

TOMUS I.

Cum Privilegio S. R. Mtis Suecia & S. R. Mtis Poloniæ ac Electoris Saxon.

HOLMIÆ,
IMPENSIS LAURENTII SALVII.
1753.

I. Introduction

a. Independence from other codes.
b. The Type Method
c. **Priority**

I. Introduction

a. Independence from other codes.
b. The Type Method
c. **Priority**

I. Introduction

a. Independence from other codes.
b. The Type Method
c. **Priority**

I. Introduction

a. Independence from other codes.
b. The Type Method
c. Priority
d. **One correct name**

I. Introduction

a. Independence from other codes.
b. The Type Method
c. Priority
d. One correct name
e. Names treated as Latin

I. Introduction

a. Independence from other codes.
b. The Type Method
c. Priority
d. One correct name
e. Names treated as Latin
f. Retroactive

I. Introduction

B. Ranks

1. **Principal Ranks & Standard Suffixes**

I. Introduction

B. Ranks

1. Principal Ranks & Standard Suffixe
2. **Suffix Exceptions**

   Apiaceae

I. Introduction

B. Ranks

1. Principal Ranks & Standard Suffixe
2. **Suffix Exceptions**

Arecaceae

I. Introduction

B. Ranks

1. Principal Ranks & Standard Suffixes
2. **Suffix Exceptions**

Asteraceae

I. Introduction

B. Ranks

1. Principal Ranks & Standard Suffixes
2. **Suffix Exceptions**

Brassicaceae

I. Introduction

B. Ranks

1. Principal Ranks & Standard Suffixes
2. **Suffix Exceptions**

Clusiaceae

I. Introduction

B. Ranks

1. Principal Ranks & Standard
2. **Suffix Exceptions**

Fabaceae

I. Introduction

B. Ranks

1. Principal Ranks & Standard Suffixes
2. **Suffix Exceptions**

Lamiaceae

I. Introduction

B. Ranks

1. Principal Ranks & Standard Suffixe
2. **Suffix Exceptions**

Poaceae

I. Introduction

B. Ranks

3. Some Others

Family
Subfamily
Tribe
Subtribe
Genus
Subgenus or Section
Species
subspecies
variatas (variety)
forma (form)

I. Introduction

B. Ranks

4. Writing

Family: Poaceae
Genus: *Zea*
Species: *Zea mays*
Subspecies: *Zea mays* ssp. *mays*

I. Introduction

B. Ranks

4. Writing

Subspecies: *Zea mays* ssp. *mays* ***Gorilla gorilla diehli***

II. Generic Names

A. Characteristics

II. Generic Names

A. Characteristics
B. Gender

II. Generic Names

A. Characteristics
B. Gender
C. Honorary genera

III. Species Names

A. Characteristics

III. Species Names

A. Characteristics
B. Gender

III. Species Names

A. Characteristics
B. Gender
C. Descriptive epithets

III. Species Names

A. Characteristics
B. Gender
C. Descriptive epithets
D. Honorary epithets

IV. Authorship

A. Generalities

IV. Authorship

A. Generalities
B. ≥ 2 Authors

IV. Authorship

A. Generalities
B. ≥ 2 Authors
C. Parenthetical & Combining Authors

IV. Authorship

A. Generalities
B. ≥ 2 Authors
C. Parenthetical & Combining Authors
D. Use of "ex"

V. Subspecific Taxa & Hybrids

A. Hybrids

V. Subspecific Taxa & Hybrids

A. Hybrids
B. Subspecies & Varieties

V. Subspecific Taxa & Hybrids

A. Hybrids
B. Subspecies & Varieties
C. Forms

V. Subspecific Taxa & Hybrids

A. Hybrids
B. Subspecies & Varieties
C. Forms
D. Cultivars

VI. Nomenclatural Types

A. Species & Infraspecific Taxa

VI. Nomenclatural Types

A. Species & Infraspecific Taxa

1. Type specimen(s)

a. Specimen to which name is permanently attached.

Cynanchum bifidum Liede & Meve, sp. nov. TYPE: Ecuador. Azuay: 1–2 km N of Nieves, Ceja forest, 3000–3100 m, 16 Nov. 1988, *Harling 25919* (holotype, GB). Figure 1.

C. intricato similis, sed differt in lobis coronae staminalis profunde bifidis.

Plants ascending, twining, 3–4 m high, richly branched, at least basally following a dichasially

VI. Nomenclatural Types

A. Species & Infraspecific Taxa

1. Type specimen(s)

a. Specimen to which name is permanently attached.

b. Promotes nomenclatural & conceptual stability

Cynanchum bifidum Liede & Meve, sp. nov. TYPE: Ecuador. Azuay: 1–2 km N of Nieves, Ceja forest, 3000–3100 m, 16 Nov. 1988, *Harling 25919* (holotype, GB). Figure 1.

C. intricato similis, sed differt in lobis coronae staminalis profunde bifidis.

Plants ascending, twining, 3–4 m high, richly branched, at least basally following a dichasially

VI. Nomenclatural Types

Example 1: Confusion in the correct attribution of the names *Q. coccinea* and *Q. rubra*

Species 1

Species 2

VI. Nomenclatural Types

Example 1: Confusion in the correct attribution of the names *Q. coccinea* and *Q. rubra.*

***Plants of WV* says:**

Q. coccinea

Q. rubra

VI. Nomenclatural Types

Example 1: Confusion in the correct attribution of the names *Q. coccinea* and *Q. rubra.*

***Plants of PA*, 2nd edition says:**

Q. rubra

Q. coccinea

VI. Nomenclatural Types

Example 1: Confusion in the correct attribution of the nan
Q. coccinea and *Q. rubra.*

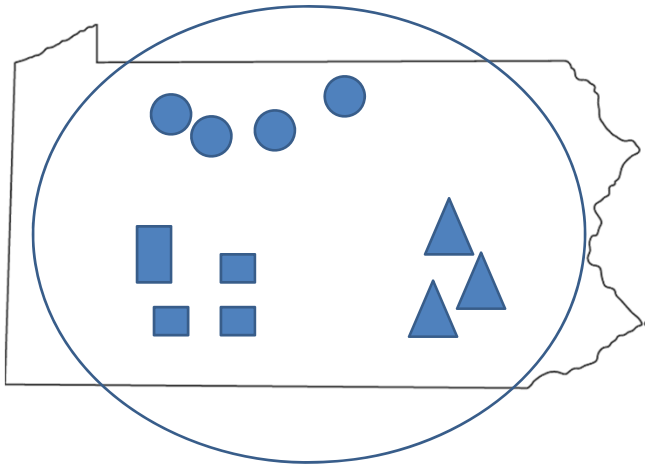
Solution: 1) revisit original description
2) inspect type specimens

Type specimen for Q. coccinea

VI. Nomenclatural Types

Example 2: Splitting

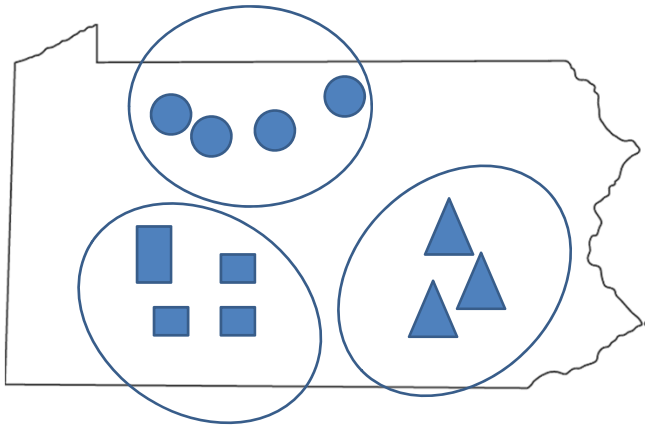
***H. grandiflorus* L. actually consists of 3 species**



VI. Nomenclatural Types

Example 2: Splitting

One retains "*H. grandiflorus* L.", but which one?



VI. Nomenclatural Types

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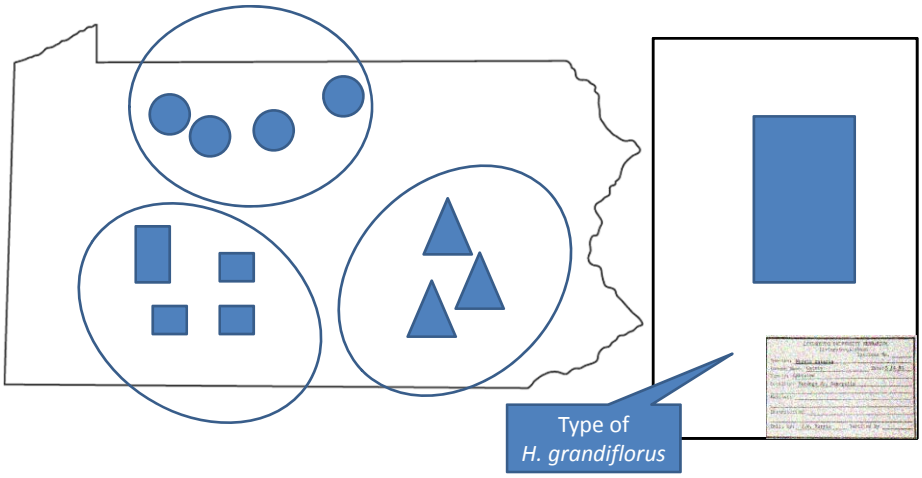
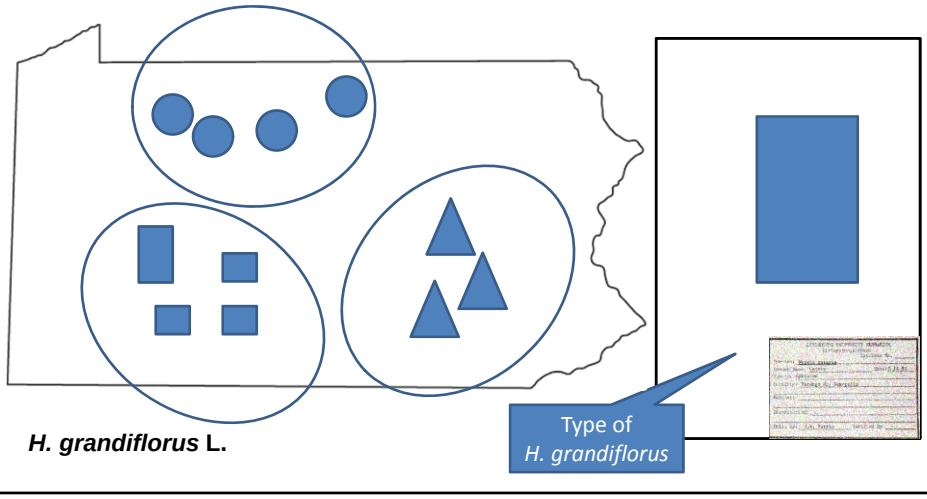


VI. Nomenclatural Types

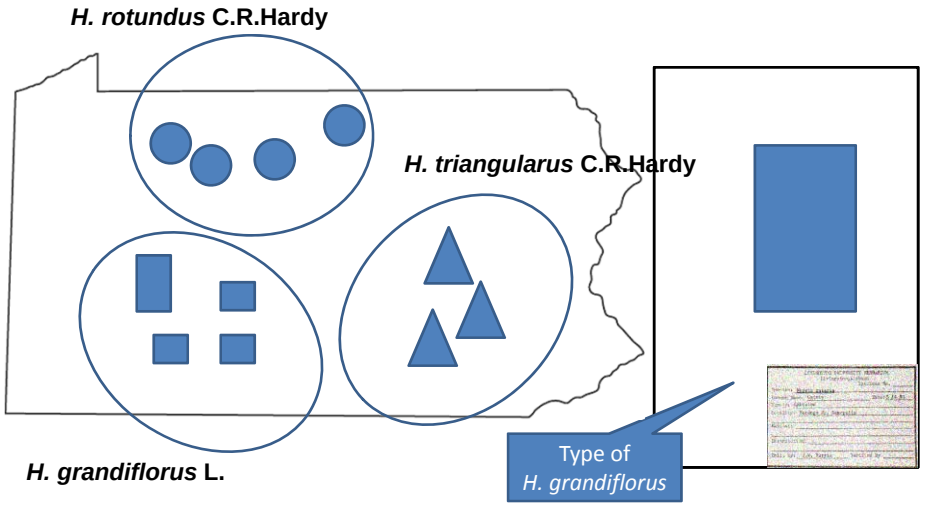
Example 2: Splitting



***H. grandiflorus* L.**

VI. Nomenclatural Types

Example 2: Splitting



VI. Nomenclatural Types

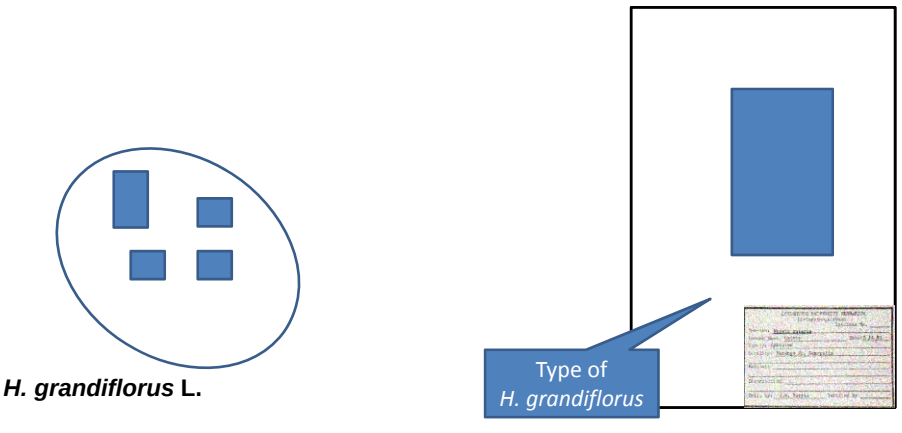
A. Species & Infraspecific Taxa

1. Type specimen(s)

a. Specimen to which name is permanently attached.

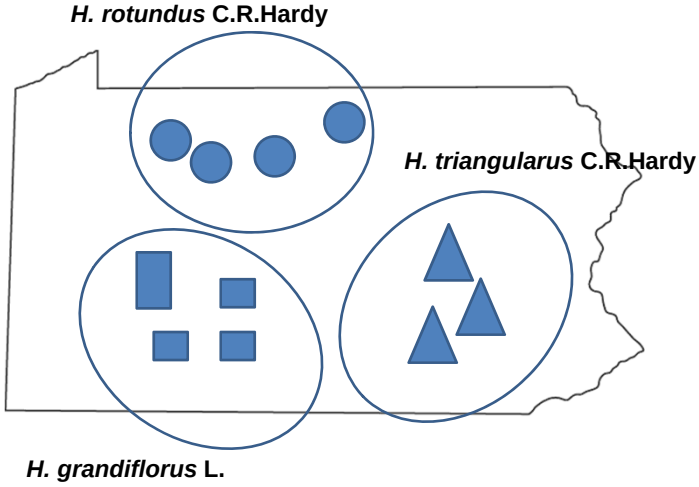
b. Promotes nomenclatural & conceptual stability

c. Type need not be typical.



VI. Nomenclatural Types

Priority, rather than types dictate lumping decisions

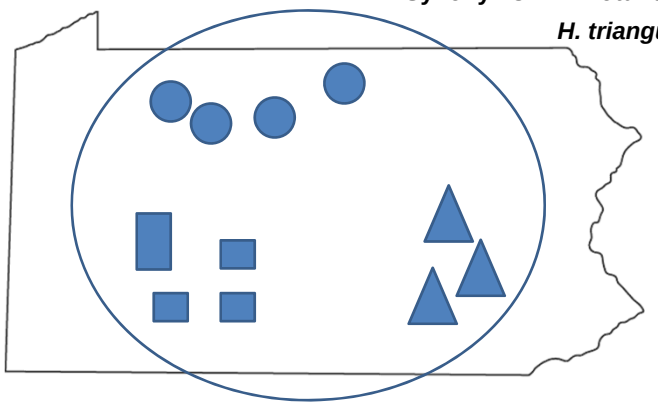


VI. Nomenclatural Types

Priority, rather than types dictate lumping decisions

Accepted Name: *H. grandiflorus* L.

Synonyms: *H. rotundus* C.R.Hardy
***H. triangularus* C.R.Hardy**

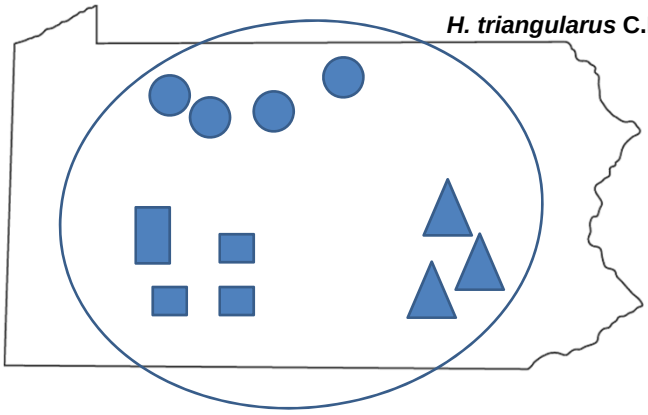


VI. Nomenclatural Types

Example 3: Lumping

Accepted Name: *H. grandiflorus* L.

Synonyms: *H. rotundus* C.R.Hardy
***H. triangularus* C.R.Hardy**



VI. Nomenclatural Types

A. Species & Infraspecific Taxa
   1. Type specimen(s)
   2. **Types of types**

VI. Nomenclatural Types

A. Species & Infraspecific Taxa
   1. Type specimen(s)
   2. Types of types
      a. Holotype

Cynanchum bifidum Liede & Meve, sp. nov. TYPE: Ecuador. Azuay: 1–2 km N of Nieves, Ceja forest, 3000–3100 m, 16 Nov. 1988, *Harling 25919* (holotype, GB). Figure 1.

C. intricato similis, sed differt in lobis coronae staminalis profunde bifidis.

Plants ascending, twining, 3–4 m high, richly branched, at least basally following a dichasially

VI. Nomenclatural Types

A. Species & Infraspecific Taxa
   1. Type specimen(s)
   2. Types of types
      a. Holotype
      b. Isotype

1. **Plowmanianthus panamensis** Faden & C. R. Hardy, sp. nov. (Fig. 5).—TYPE: PANAMA. Colón: headwaters of Río Boqueron near fork with Río Nombre de Diosito. On wet slopes in forest along stream, ca. 150–175 m, 4 May 2000, *Hardy 242* (holotype: PMA; isotypes: BH, NY, US).

VI. Nomenclatural Types

A. Species & Infraspecific Taxa
   1. Type specimen(s)
   2. **Types of types**
      a. Holotype
      b. Isotype
      c. Lectotype

Needed when….
1) Holotype destroyed/lost
2) No type designated (e.g. prior to Cambridge Code, 1930)

VI. Nomenclatural Types

A. Species & Infraspecific Taxa
   1. Type specimen(s)
   2. **Types of types**
      a. Holotype
      b. Isotype
      c. Lectotype

Needed when….
1) Holotype destroyed/lost
2) No type designated (e.g. prior to Cambridge Code, 1930)

Select from (ranked list):
1) Among the isotypes
2) Other specimens examined by author.

VI. Nomenclatural Types

A. Species & Infraspecific Taxa
   1. Type specimen(s)
   2. **Types of types**
      a. Holotype
      b. Isotype
      c. Lectotype
      d. Neotype

Needed when….
1) No holo, iso, or lectotyes available.

VI. Nomenclatural Types

A. Species & Infraspecific Taxa
   1. Type specimen(s)
   2. **Types of types**
      a. Holotype
      b. Isotype
      c. Lectotype
      d. Neotype

Needed when….
1) No holo, iso, or lectotyes available.

Should be…
1) chosen by current authority in pub
2) match original description
3) of similar provenance

VI. Nomenclatural Types

A. Species & Infraspecific Taxa
B. Genus

VI. Nomenclatural Types

A. Species & Infraspecific Taxa
B. Genus
   1) Type sp. (technically the type specimen of the type sp.)
      a. One so named by author or the first species named.

dy et al., in prep.). Accordingly, this clade is described here as a new genus with five new species from tropical America (Fig. 1).

TAXONOMIC TREATMENT

Plowmanianthus Faden & C. R. Hardy, gen. nov.—TYPE: *Plowmanianthus perforans* Faden & C. R. Hardy sp. nov.

VI. Nomenclatural Types

A. Species & Infraspecific Taxa
B. Genus
   1) Type sp. (technically the type specimen of the type sp.)
      a. One so named by author or the first species named.
      b. Sp. to which genus name is permanently attached

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Plowmanianthus Faden & C. R. Hardy, gen. nov.—TYPE: *Plowmanianthus perforans* Faden & C. R. Hardy sp. nov.

VI. Nomenclatural Types

A. Species & Infraspecific Taxa
B. Genus
   1) Type sp. (technically the type specimen of the type sp.)
      a. One so named by author or the first species named.
      b. Sp. to which genus name is permanently attached

What if Ted Nugent decides to split *Plowmanianthus* into 2 genera?

Plowmanianthus Faden et C.R.Hardy
- *Plowmanianthus dressleri* Faden et C.R.Hardy
- *Plowmanianthus panamensis* Faden et C.R.Hardy
- *Plowmanianthus grandifolius* Faden et C.R.Hardy
- *Plowmanianthus perforans* Faden et C.R.Hardy
- *Plowmanianthus peruvianus* C.R.Hardy et Faden

VI. Nomenclatural Types

A. Species & Infraspecific Taxa
B. **Genus**
   1) **Type sp. (technically the type specimen of the type sp.)**
      a. One so named by author or the first species named.
      b. Sp. to which genus name is permanently attached

What if Ted Nugent decides to split *Plowmanianthus* into 2 genera?

Plowmanianthus Faden et C.R.Hardy
Plowmanianthus grandifolius Faden et C.R.Hardy
Plowmanianthus perforans Faden et C.R.Hardy
Plowmanianthus peruvianus C.R.Hardy et Faden

Newgenus T.Nugent
Newgenus dressleri (Faden et C.R.Hardy) T.Nugent
Newgenus panamensis (Faden et C.R.Hardy) T.Nugent

VI. Nomenclatural Types

A. Species & Infraspecific Taxa
B. Genus
C. **Family**

Classification 1:

Magnoliaceae Juss.
Liriodendron L.
Magnolia L.
Michelia L.

Classification 2:

Magnoliaceae Juss.
Magnolia L.
Michelia L.

Liriodendraceae T.Nugent
Liriodendron L.

Classification 3:

Magnoliaceae Juss.
Liriodendron L.
Magnolia L.

Micheliaceae T.Nugent
Michelia L.

Classification 4:

Magnoliaceae Juss.
Michelia L.

Liriodendraceae T.Nugent
Liriodendron L.
Magnolia L.

VI. Nomenclatural Types

A. Species & Infraspecific Taxa
B. Genus
C. **Family**

Recall that family names are based on type genus and –aceae
- **Arecaceae (*Areca*)**
- **Lamiaceae (*Lamium*)**

VI. Nomenclatural Types

A. Species & Infraspecific Taxa
B. Genus
C. **Family**

Recall that family names are based on type genus and –aceae
- **Arecaceae (*Areca*)**
- **Lamiaceae (*Lamium*)**

But IBC voted to conserve old names while still accepting new names
- **Palmae**
- **Labiatae**

VII. Legitamate Names & Valid Pub

A. Proper construction and original

e.g.

- Magnoliaceae Juss.
- *Liriodendron* L.
- *Liriodendron tulipifera* L.
- *Liriodendron tulipifera* ssp. *tulipifera* T.Nugent

VII. Legitamate Names & Valid Pub

B. Clear indication of rank & status

PhytoKeys 46: 1-19 (04 Feb 2015)
doi: 10.3897/phytokeys.46.8937

Research Article

***Sirdavidia*, an extraordinary new genus of Annonaceae from Gabon**

Thomas L.P. Couvreur, Raoul Niangadouma, Bonaventure Sonké, Hervé Sauquet

Abstract

A distinctive new monotypic genus
Sirdavidia, in honor to Sir David Atte
which is very distinct from a morphol

genus novum

Taxonomic description

Sirdavidia Couvreur & Sauquet, gen. nov.

urn:lsid:ipni.org:names:77145065-1

Diagnosis

Genus with *Solanum*-like flowers, inflorescences axillary or cauliflorous, sepals valvate, petals valvate, subequal, recurved at anthesis, red; stamens bright yellow; carpel single; monocarp sessile, placentation lateral, ovules uniseriate.

Type species

Sirdavidia solannona Couvreur & Sauquet.

VII. Legitamate Names & Valid Pub

B. Clear indication of rank & status

Cynanchum bifidum Liede & Meve, sp. nov. TYPE: Ecuador. Azuay: 1–2 km N of Nieves, Ceja forest, 3000–3100 m, 16 Nov. 1988, *Harling 25919* (holotype, GB). Figur[illegible]1.

C. intricato similis, sed differt in l[illegible] coronae staminalis profunde bifidis.

Plants ascending, twining[illegible]4 m high, richly branched, at least basally [illegible]owing a dichasially

species nova

Plowmanianthus grandifolius subsp. **robustus** C. R. Hardy & Faden, subsp. nov.—TYPE: ECUADOR. Napo: Parque Nacional Yasuní, Estación Científica Yasuní, 150–200 m, [illegible] Dec 1998, *Hardy 200* (holotype: QCA; isotypes: B[illegible] NY, US).

A subspecie typica inflorescentiis va[illegible]s perforantibus, pedunculis cincinnorum longiori[illegible]pedicellis longioribus, pagina adaxiali laminae semp[illegible]labrescenti differt.

Plants to 40 cm tall. Leaves 20–36.65 × 4.6–[illegible]

subspecies nova

Smithatris supraneanae W. J. Kress & K. Larsen, gen. et sp. nov. (Figs. 1–3).—TYPE: THAILAND. Saraburi: 16°45Ń, 100°50É. Limestone mountain at ca. 200 m elevation. 5 September 1998, *K. Larsen 47207* (holotype: BKF!; isotypes: AAU!, PSU!, US!).

Herba Curcumae et Hitcheniae similis, Hitcheniae similior foliis petiolatis, inflorescentia pedunculata bracteis congestis saccatis, tubo corollae longo, sed differt labello profunde fisso, structura cucullata staminodiis lateralibus formata et lobo dorsali corollae antheram partialiter includenti.

Medium-size rhizomatous herb with roots bearing spherical tubers. Stem up to 120 cm in height.

genus et species nova

VII. Legitamate Names & Valid Pub

B. Clear indication of rank & status

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Published in final edited form as:
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Published online 2015 Jul 2. doi: 10.1111/jpy.12309

PMCID: PMC4551411
NIHMSID: NIHMS694199

***Caldora penicillata* gen. nov., comb. nov. (Cyanobacteria), a pantropical marine species with biomedical relevance**

Niclas Engene[2]

Niclas Engene, Department of Biological [illegible]nces, Florida International [illegible]versity, Miami, FL 33199, USA;

Ana Tronholm

genus novum

combinatio nova

VII. Legitamate Names & Valid Pub

D. Description or Diagnosis*

Cynanchum bifidum Liede & Meve, sp. nov. TYPE: Ecuador. Azuay: 1–2 km N of Nieves, Ceja forest, 3000–3100 m, 16 Nov. 1988, *Harling 25919* (holotype, GB). Figure 1.

C. intricato similis, sed differt in lobis coronae staminalis profunde bifidis.

Plants ascending, twining, 3–4 m high, richly branched, at least basally following a dichasially

Plowmanianthus grandifolius subsp. **robustus** C. R. Hardy & Faden, subsp. nov.—TYPE: ECUADOR. Napo: Parque Nacional Yasuní, Estación Científica Yasuní, 150–200 m, 22 Dec 1998, *Hardy 200* (holotype: QCA; isotypes: BH, NY, US).

A subspecie typica inflorescentiis vaginas perforantibus, pedunculis cincinnorum longioribus, pedicellis longioribus, pagina adaxiali laminae semper glabrescenti differt.

Plants to 40 cm tall. Leaves 20–36.65 × 4.6–8.2 cm;

Smithatris supraneanae W. J. Kress & K. Larsen, gen. et sp. nov. (Figs. 1–3).—TYPE: THAILAND. Saraburi: 16°45Ń, 100°50É. Limestone mountain at ca. 200 m elevation. 5 September 1998, *K. Larsen 47207* (holotype: BKF!; isotypes: AAU!, PSU!, US!).

Herba Curcumae et Hitcheniae similis, Hitcheniae similior foliis petiolatis, inflorescentia pedunculata bracteis congestis saccatis, tubo corollae longo, sed differt labello profunde fisso, structura cucullata staminodiis lateralibus formata et lobo dorsali corollae antheram partialiter includenti.

Medium-size rhizomatous herb with roots bearing spherical tubers. Stem up to 120 cm in height.

VII. Legitamate Names & Valid Pub

E. Effective Publication*