

**COMMON NAMES**



**COMMON NAMES**

**NON-FORMAL**

**COMMON NAMES**



**COMMON NAMES**

**NON-FORMAL**

**USED BY NON-SCIENTISTS**

**COMMON NAMES**

# COMMON NAMES ADVANTAGES

**COMMON NAMES  
ADVANTAGES**

**COMMON NAMES  
EASILY  
PRONOUNCED**

**COMMON NAMES  
ADVANTAGES**

# **COMMON NAMES ADVANTAGES**



**COMMON NAMES  
EASILY  
REMEMBERED**

**COMMON NAMES  
ADVANTAGES**





**WATER LILY**



# COMMON NAMES

# DISADVANTAGES

**COMMON NAMES  
DISADVANTAGES**

**UNRELIABLE FOR  
SCIENTIFIC  
COMMUNICATION**

**COMMON NAMES  
DISADVANTAGES**

**COMMON NAMES  
DISADVANTAGES**



**WIDE RANGING  
PLANTS 1+  
COMMON NAME**

**COMMON NAMES  
DISADVANTAGES**

#



**DANDELION**



200+  
**COMMON NAMES**  
**WORLDWIDE**

**DANDELION**

**COMMON NAMES  
DISADVANTAGES**



**SAME COMMON  
NAME APPLIED  
1+ SPECIES**

**COMMON NAMES  
DISADVANTAGES**



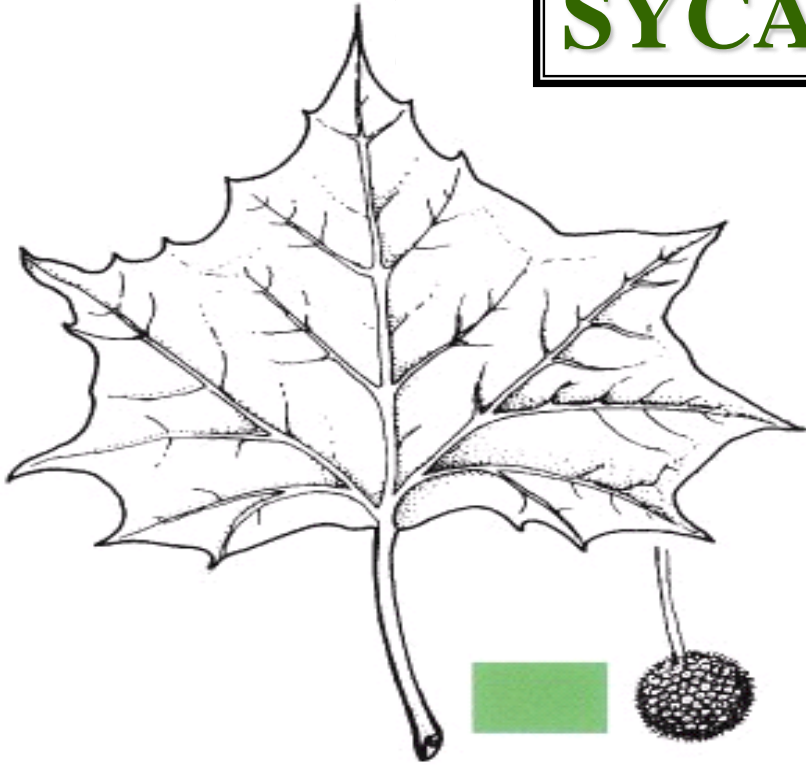
?



**SYCAMORE**



# SYCAMORE



**COMMON NAMES  
DISADVANTAGES**



**INCONSPICUOUS**

**PLANTS COMMON NAME**

**ABSENT**

**COMMON NAMES  
DISADVANTAGES**



**LIVERWORTS**



**INCONSPICUOUS  
PLANTS COMON NAME  
ABSENT**

**LIVERWORTS**

# SCIENTIFIC NAMES

# SCIENTIFIC NAMES



# SCIENTIFIC NAMES

FORMAL

# SCIENTIFIC NAMES



# SCIENTIFIC NAMES

FORMAL  
USED BY SCIENTISTS

SCIENTIFIC NAMES



# SCIENTIFIC NAMES ADVANTAGES

# **SCIENTIFIC NAMES ADVANTAGES**

**RELIABLE FOR  
SCIENTIFIC  
COMMUNICATION**

**SCIENTIFIC NAMES  
ADVANTAGES**

# SCIENTIFIC NAMES ADVANTAGES

NO 2 SPECIES  
IDENTICAL  
SCIENTIFIC NAME

SCIENTIFIC NAMES  
ADVANTAGES

# **SCIENTIFIC NAMES ADVANTAGES**

EG



**ALL KNOWN SPECIES  
POSSESS  
SCIENTIFIC NAME**

**SCIENTIFIC NAMES  
ADVANTAGES**



# RELIABLE SCIENTIFIC COMMUNICATION



*Nymphaea odorata*

A photograph of two white water lilies in full bloom, surrounded by large green lily pads on a dark pond. The text 'NO 2 SPECIES IDENTICAL SCIENTIFIC NAME' is overlaid in white serif font at the top. A small grey square with a white plus sign is in the top right corner. A black-bordered box at the bottom right contains the scientific name.

NO 2 SPECIES  
IDENTICAL SCIENTIFIC NAME

*Nymphaea odorata*

A photograph of two white water lilies in full bloom, surrounded by numerous large, round green lily pads on a dark pond. The text is overlaid on the top half of the image.

ALL KNOWN SPECIES  
POSSESS SCIENTIFIC NAME

*Nymphaea odorata*

# SCIENTIFIC NAMES DISADVANTAGES



**SCIENTIFIC NAMES  
DISADVANTAGES**

**SCIENTIFIC NAMES  
DIFFICULT  
PRONOUNCE**

**SCIENTIFIC NAMES  
DIAADVANTAGES**

# SCIENTIFIC NAMES DISADVANTAGES



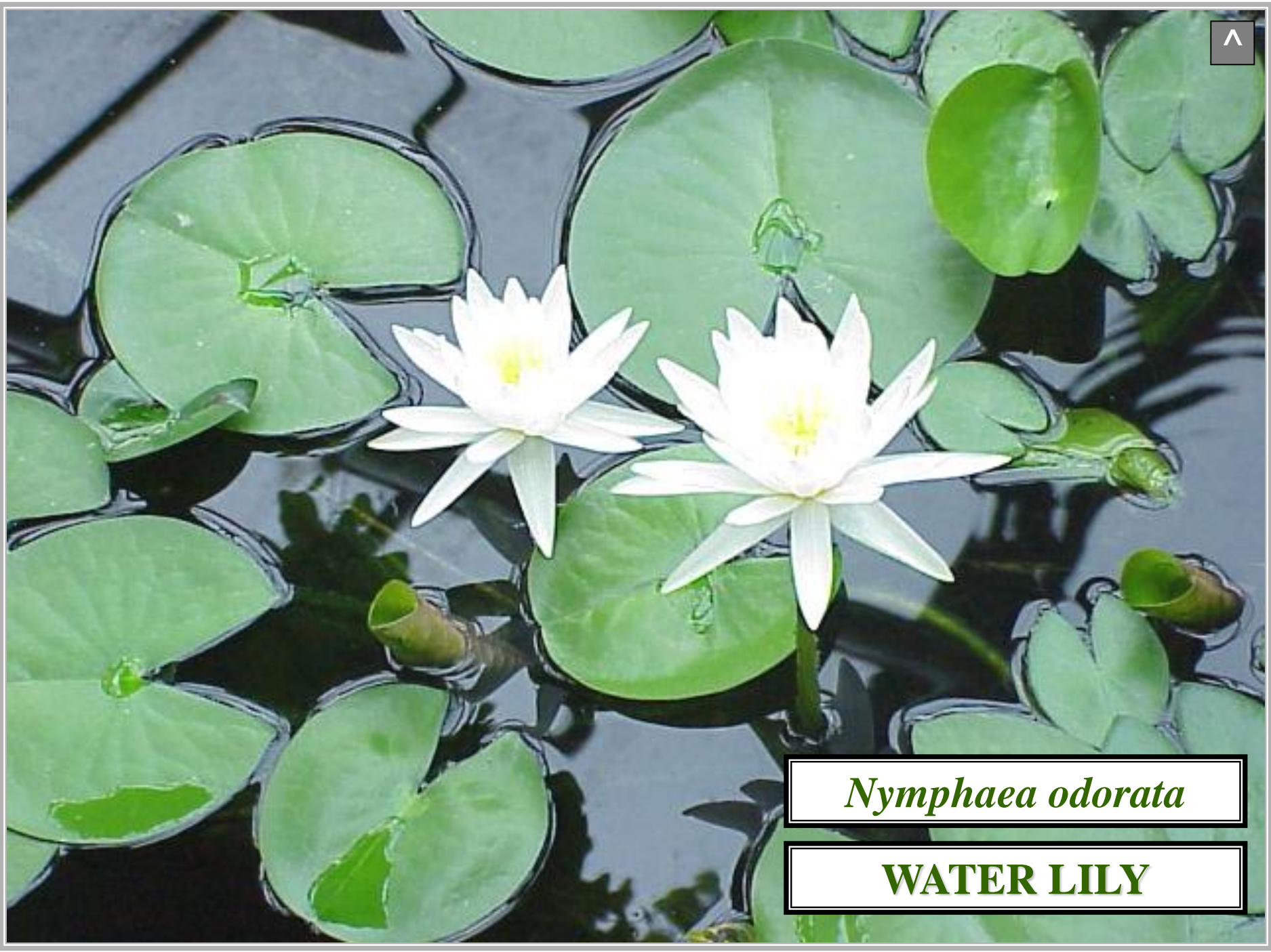
# SCIENTIFIC NAMES DIFFICULT REMEMBER

# SCIENTIFIC NAMES DISADVANTAGES

N



**WATER LILY**



*Nymphaea odorata*

**WATER LILY**



**SCIENTIFIC  
NAMES  
HISTORICAL  
BACKGROUND**



**POLYNOMIALS**  
**VS**  
**BINOMIALS**

# POLYNOMIALS

# POLYNOMIALS





**POLYNOMIALS**

**DESCRIPTIVE PHRASE**

**POLYNOMIALS**



# POLYNOMIALS

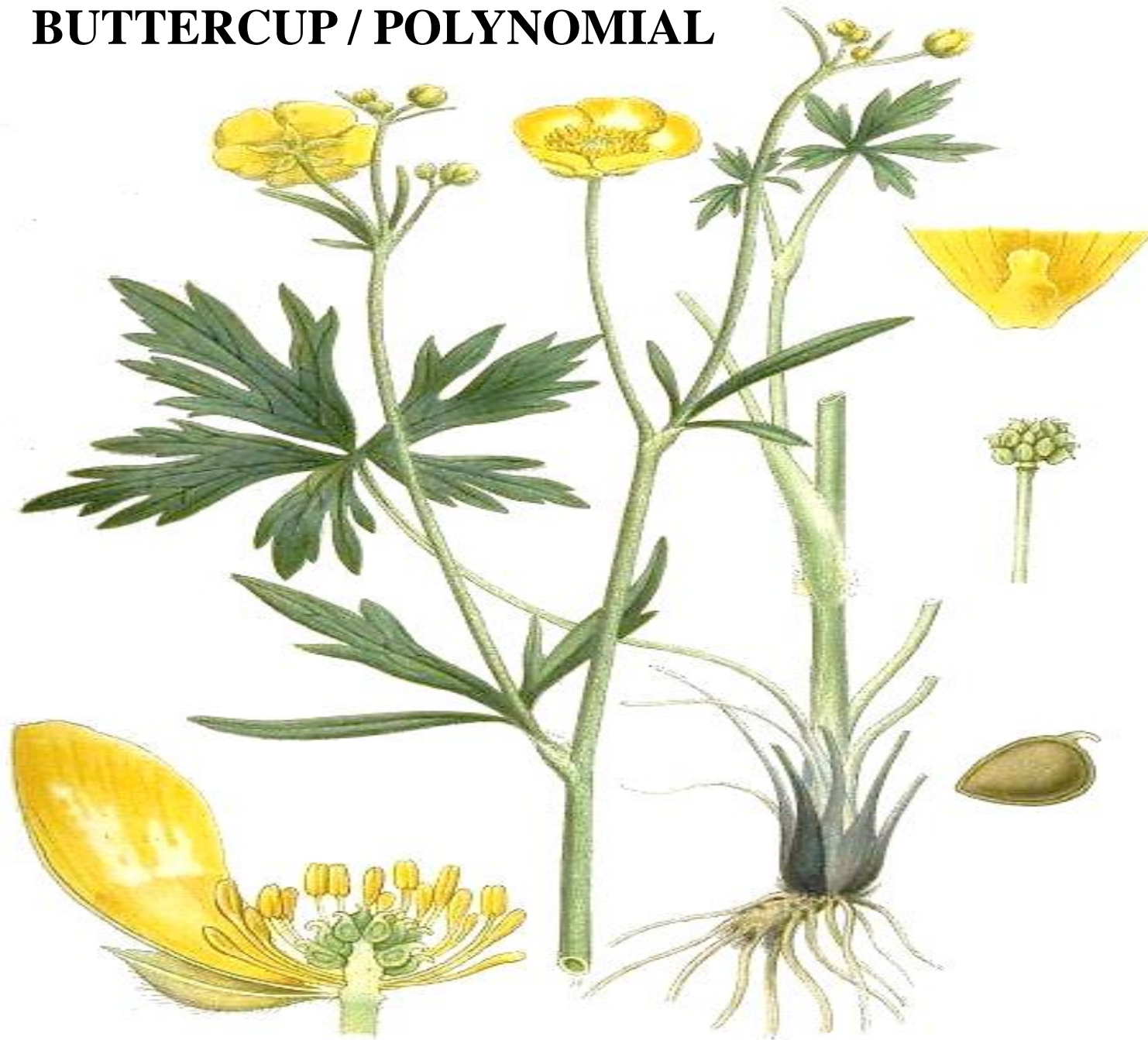
DESCRIPTIVE PHRASE

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ALL SCIENTIFIC NAMES  
INITIALLY POLYNOMIALS

# POLYNOMIALS

# BUTTERCUP / POLYNOMIAL

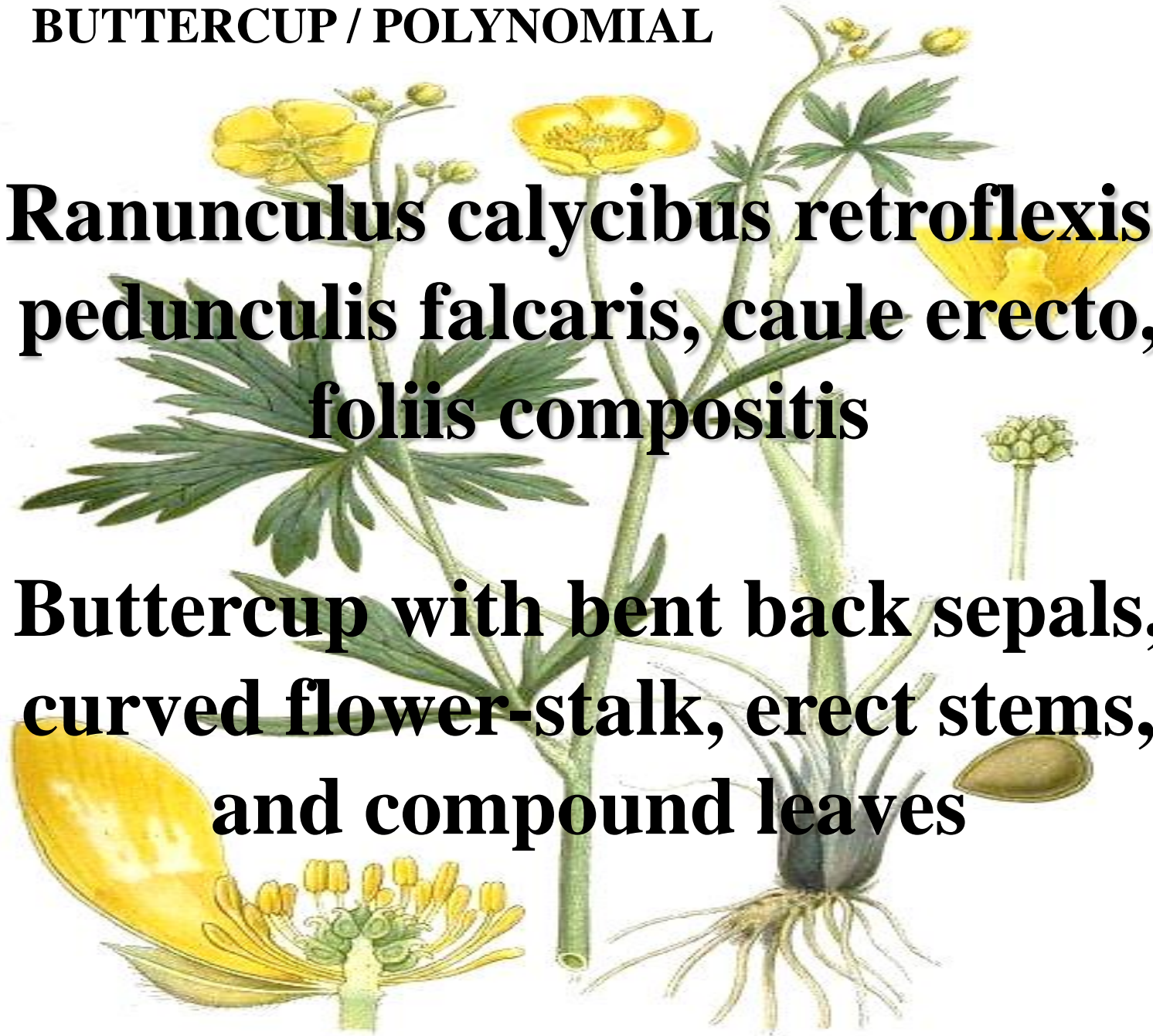


**BUTTERCUP / POLYNOMIAL**

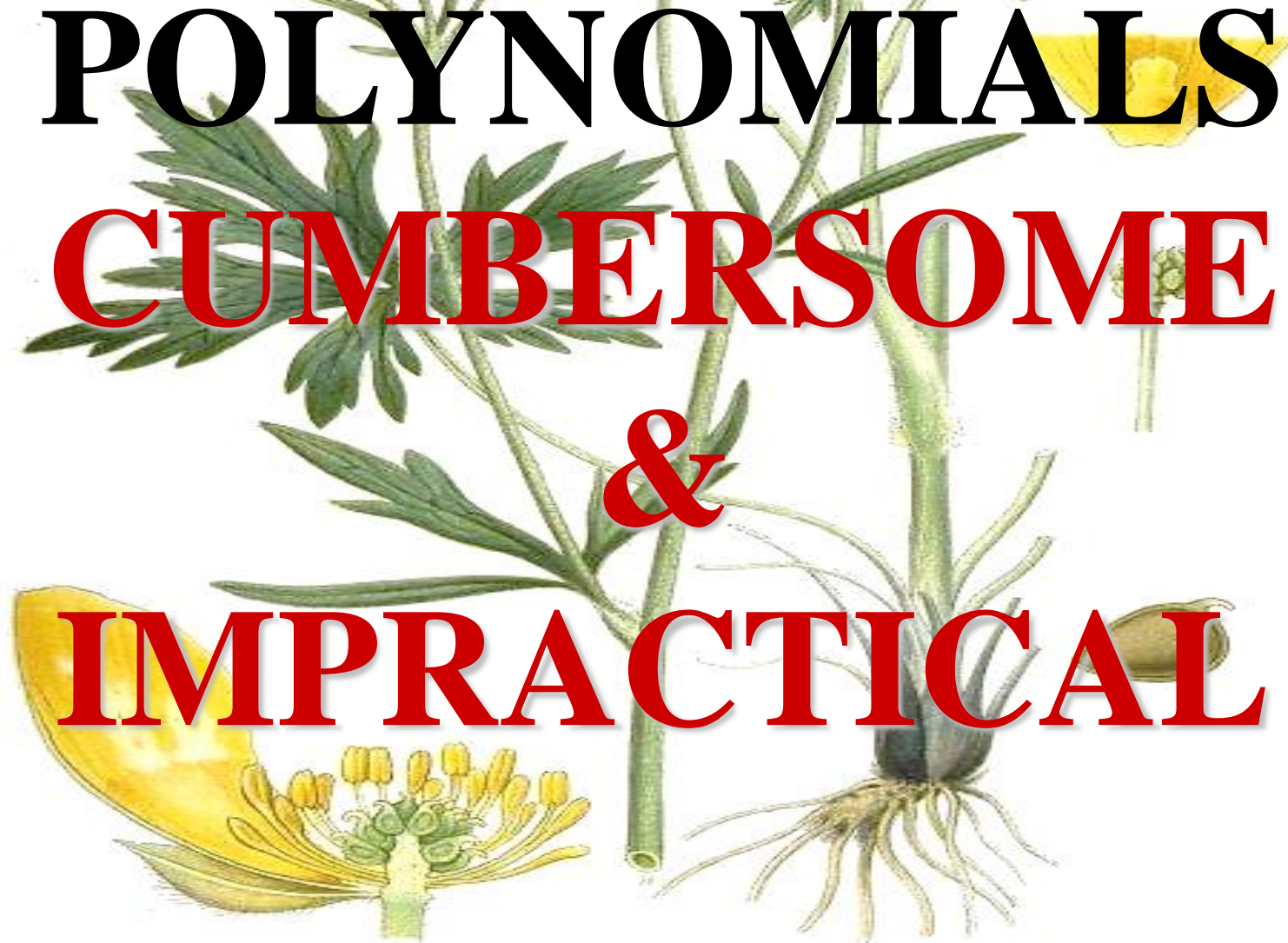


**Ranunculus calycibus retroflexis,  
pedunculis falcatis, caule erecto,  
foliis compositis**

**Buttercup with bent back sepals,  
curved flower-stalk, erect stems,  
and compound leaves**



BUTTERCUP / POLYNOMIAL



**POLYNOMIALS**

**CUMBERSOME**

**&**

**IMPRACTICAL**



# **BINOMIALS**



# **BINOMINALS HISTORICAL BACKGROUND**



# **GASPAR BAUHIN**





**CASPAR BAUHIN**



P



**SWISS  
BOTANIST**

**CASPAR BAUHIN**



# ***PINAX***



**DESCRIBED ALL KNOWN SPECIES**

1623



# *PINAX*

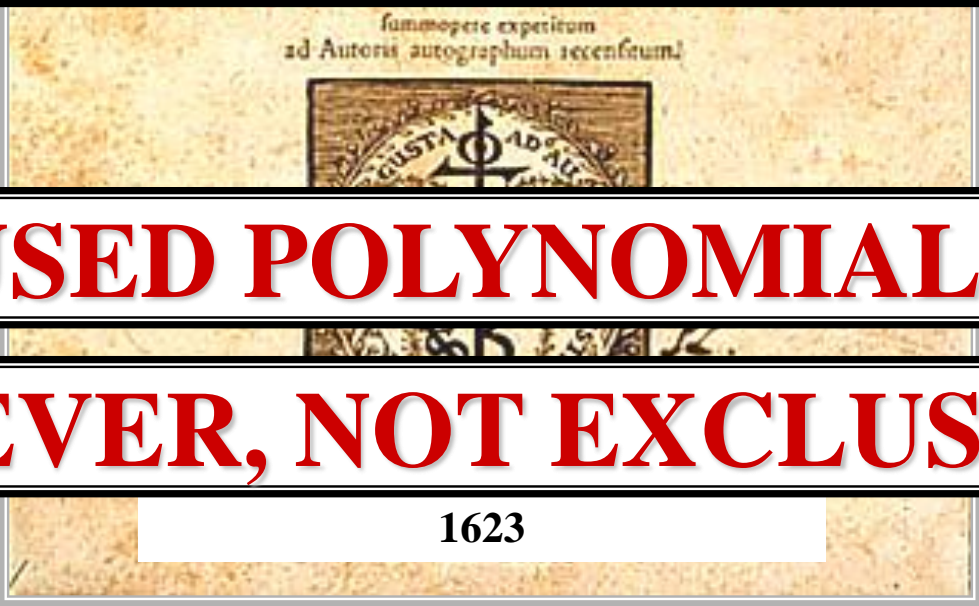


**USED POLYNOMIALS**

1623

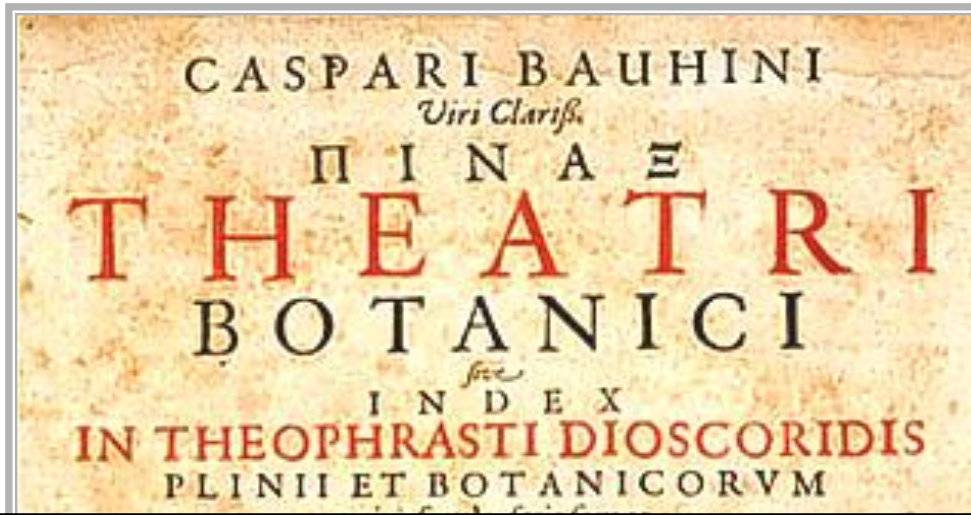


# ***PINAX***



**USED POLYNOMIALS**

**HOWEVER, NOT EXCLUSIVELY**

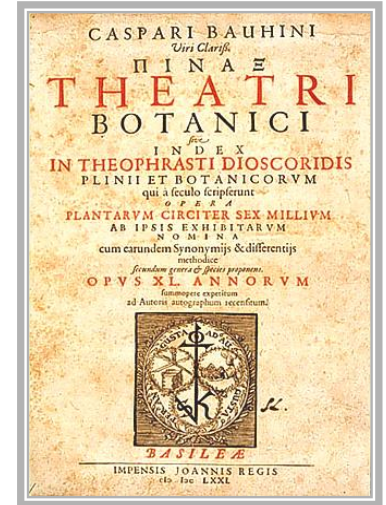
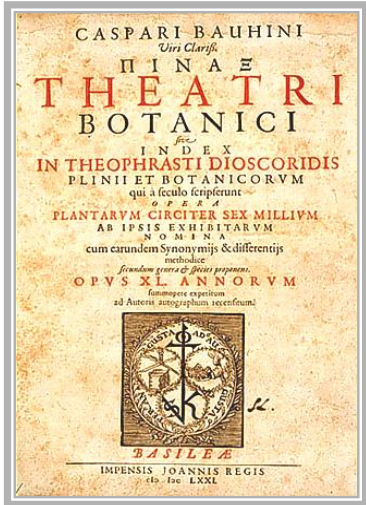


# *PINAX*



**ALSO USED BINOMIALS**

1623



**FIRST BOTANIST TO USE  
BINOMIALS**

**CASPAR BAUHIN**



# CARL LINNÆUS





**CARL LINNAEUS**



**SWEDISH  
BOTANIST**

**CARL LINNAEUS**



**“FATHER MODERN PLANT TAXONOMY”**

**CARL LINNAEUS**



**POPULARIZED  
BINOMIAL NOMENCLATURE**

**CARL LINNAEUS**



CAROLI LINNÆI  
 SVE RIGIE MITIS SVEDIA ARCHIATRI, MEDIC. & BOTAN.  
 PROFESS. UPSAL; EQUITIS AUR. DE STELLA POLARI,  
 DEC. 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.

Com Privilegio S. R. Mitis Sveciæ et S. R. Mitis Poloniæ ac Electoris Saxon.

HOLMIÆ,  
 IMPENSIS LAURENTII SALVII.  
 1761.

1753



CAROLI LINNÆI  
 SVE RIGIE MITIS SVEDIA ARCHIATRI, MEDIC. & BOTAN.  
 PROFESS. UPSAL; EQUITIS AUR. DE STELLA POLARI,  
 DEC. 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.



**DESCRIBED ALL KNOWN SPECIES**



CAROLI LINNÆI  
SIE RIGIE MITIS SVEDIA ARCHIATRI, MEDIC. & BOTAN.  
PROFESS. UPSAL; EQUITIS AUR. DE STELLA POLARI,  
DEC. NON. ACAD. IMPER. MONSPEL. BEROL. TOLOS.  
UPSAL. STOCKH. SOC. & PARIS. CORESP

# SPECIES PLANTARUM.

EXHIBENTES  
PLANTAS RITE COGNITAS.

AD  
*GENERA RELATAS.*

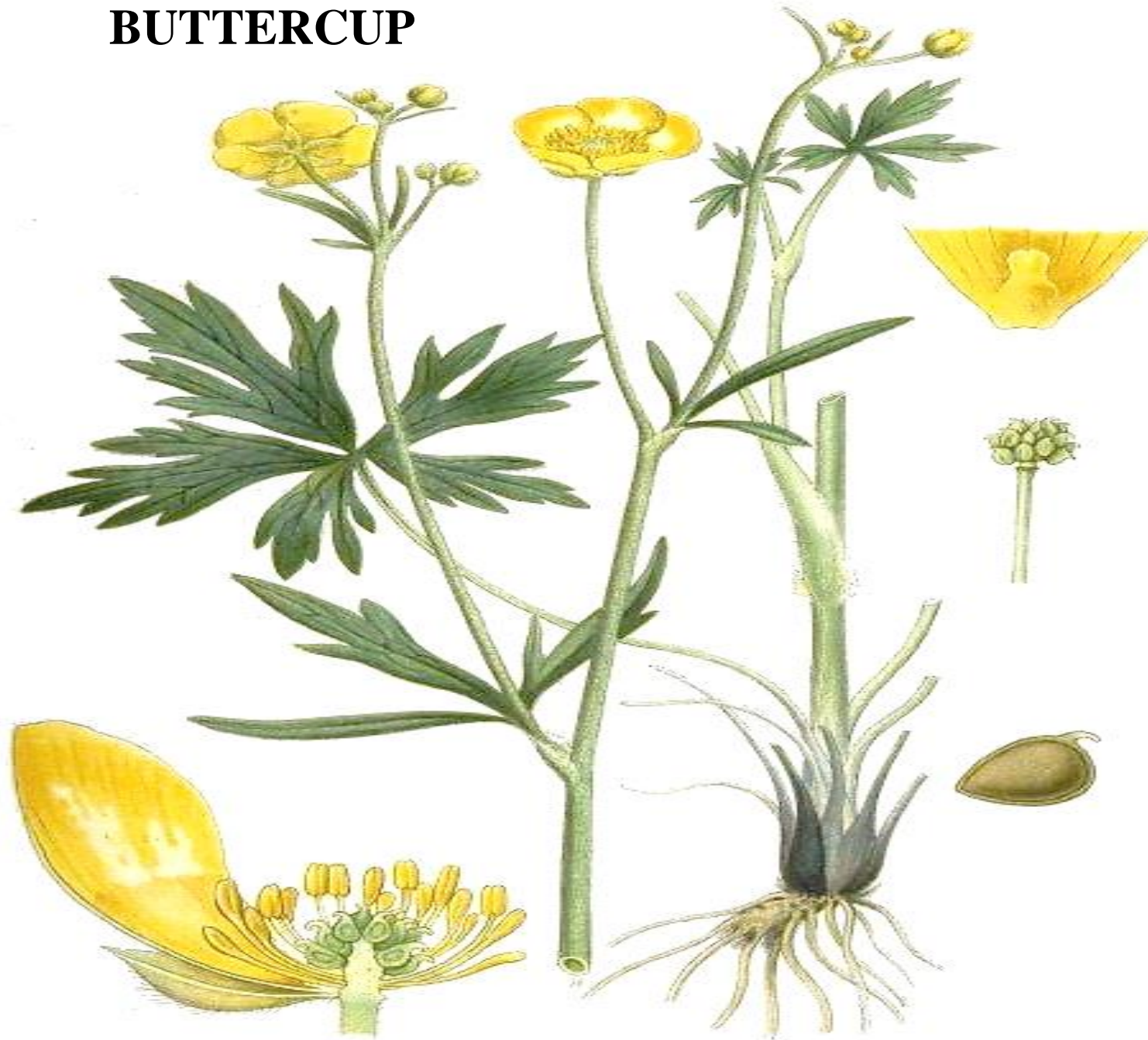
CUM  
DIFFERENTIIS SPECIFICIS,  
NOMINIBUS TRIVIALIBUS,  
SYNONYMIS SELECTIS,  
LOCIS NATALIBUS,  
SECUNDUM  
*SYSTEMA SEXUALE*  
DIGESTAS.

TOMUS I.



**USED BINOMIALS EXCLUSIVELY**

# BUTTERCUP

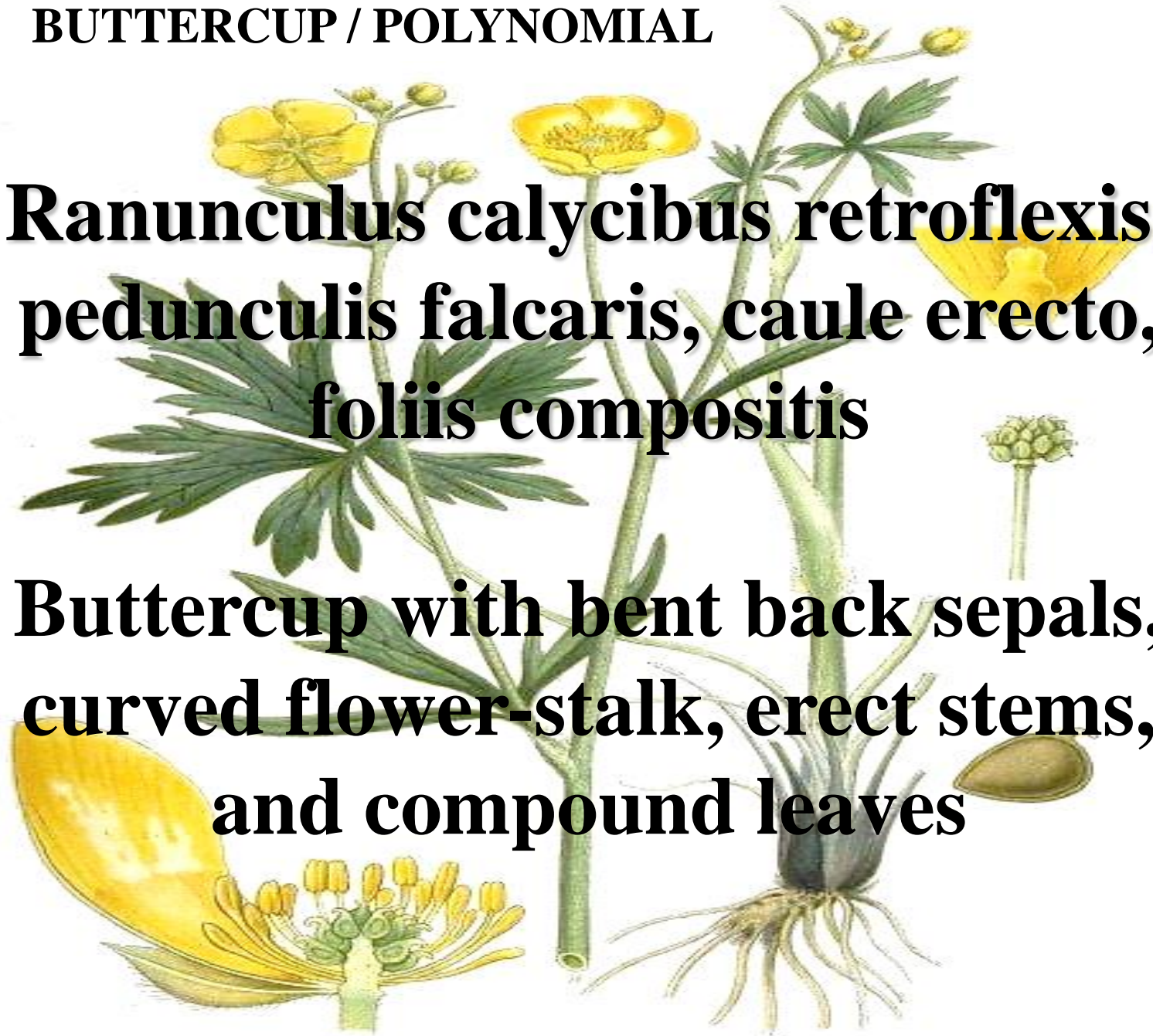




**BUTTERCUP / POLYNOMIAL**

**Ranunculus calycibus retroflexis,  
pedunculis falcatis, caule erecto,  
foliis compositis**

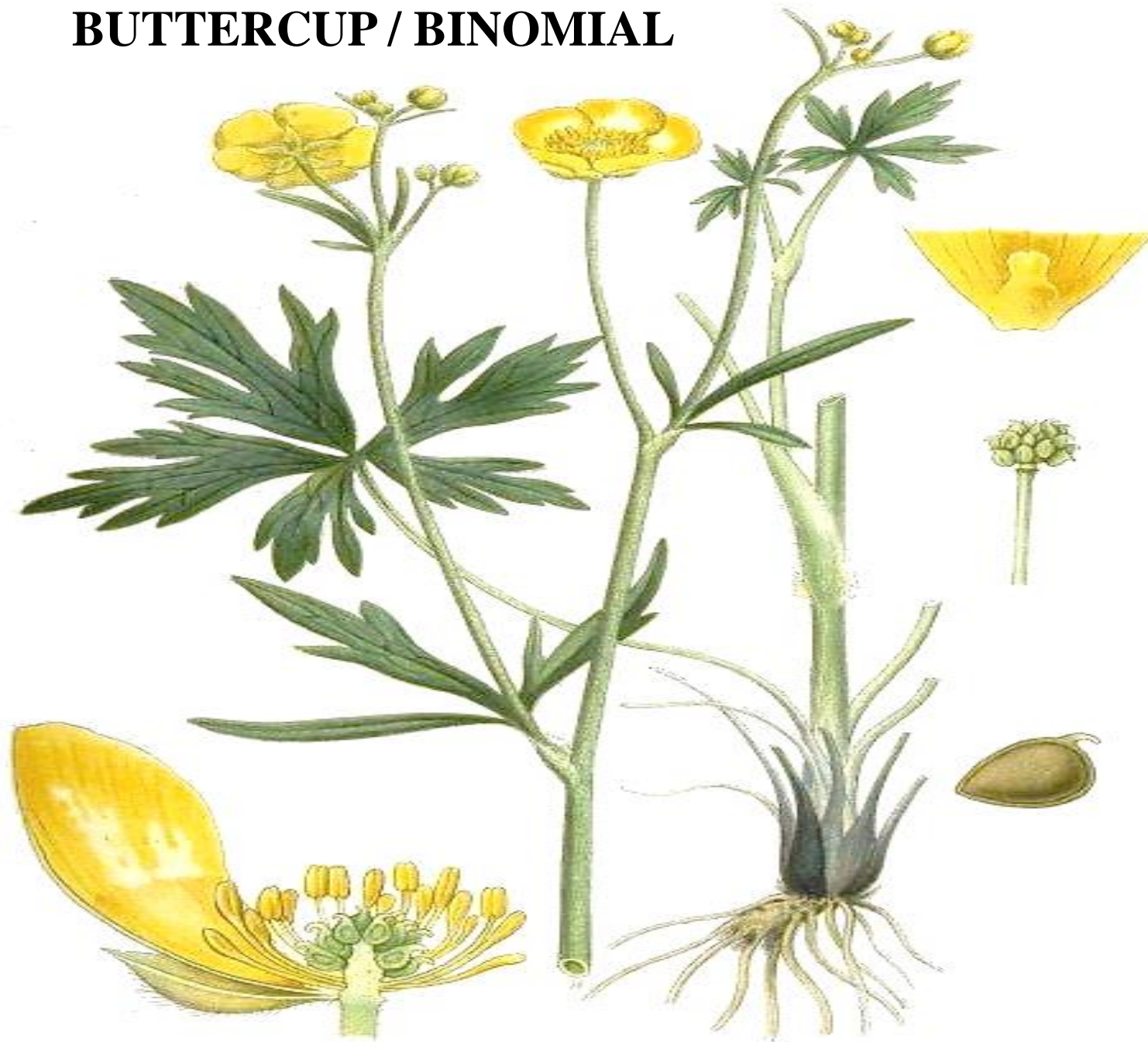
**Buttercup with bent back sepals,  
curved flower-stalk, erect stems,  
and compound leaves**



# BUTTERCUP / BINOMIAL

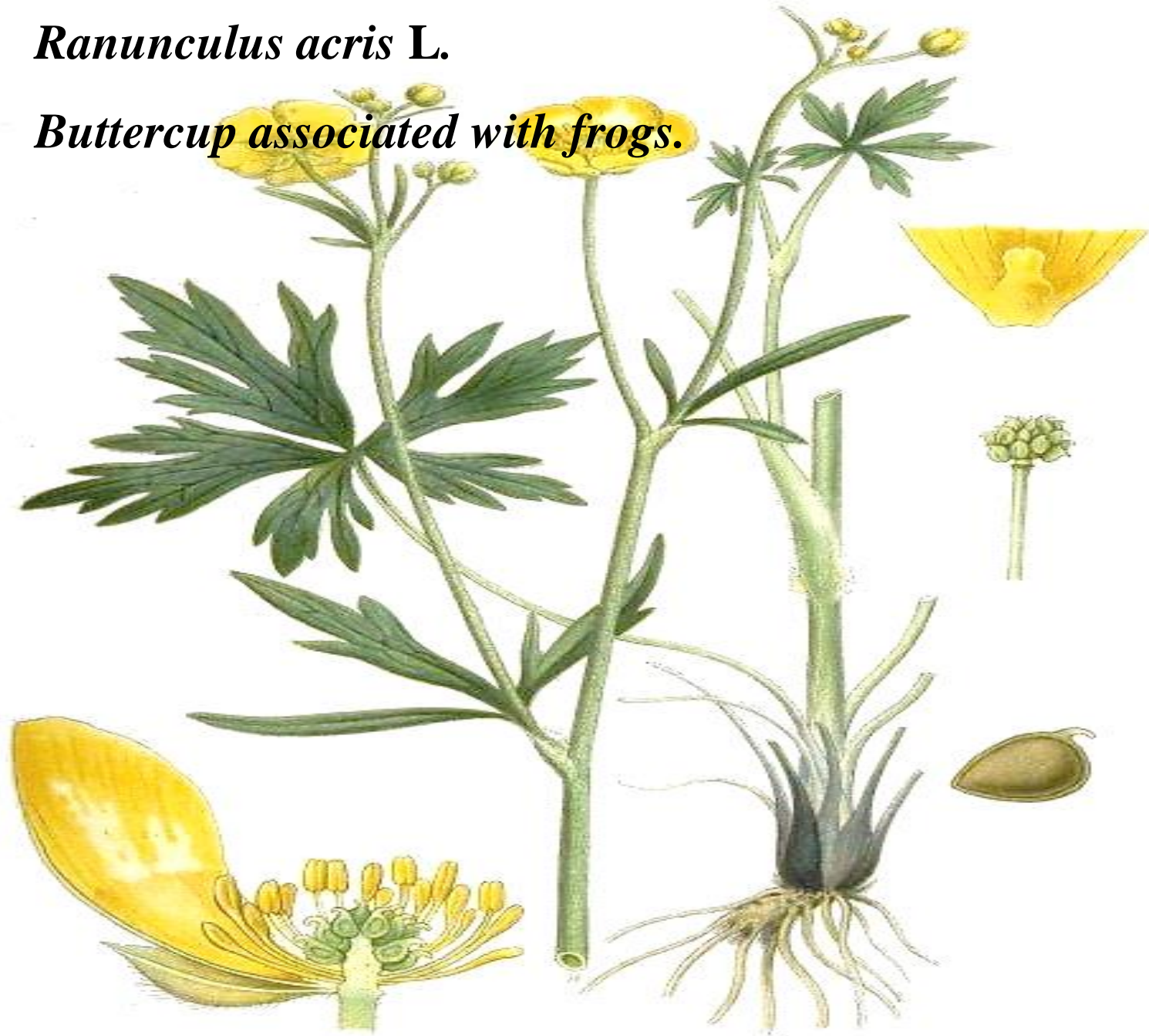
+

R



*Ranunculus acris* L.

*Buttercup associated with frogs.*



**BINOMINALS**

**LESS**

**CUMBERSOME**

**&**

**HIGHLY**

**PRACTICAL**



CAROLI LINNÆI  
Sive RIGIE MITIS SVECIA ARCHIATRI, MEDIC. & BOTAN.  
PROFESS. UPSAL; EQUITIS AUR. DE STELLA POLARI,  
DEC. 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,



**BINOMIALS  
NOW  
UNIVERSALLY ACCEPTED**



CAROLI LINNÆI  
Sive RIGIE MITIS SVEDIA ARCHIATRI, MEDIC. & BOTAN.  
PROFESS. UPSAL; EQUITIS AUR. DE STELLA POLARI,  
DEC. 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,

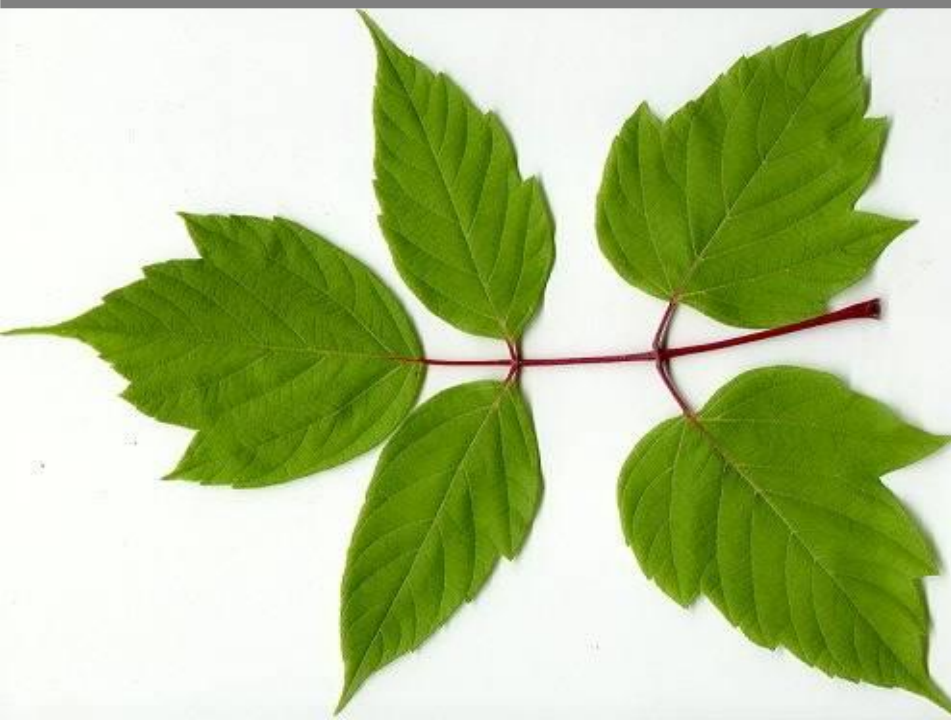


## STARTING POINT TRACHEOPHYTE NOMENCLATURE

1753



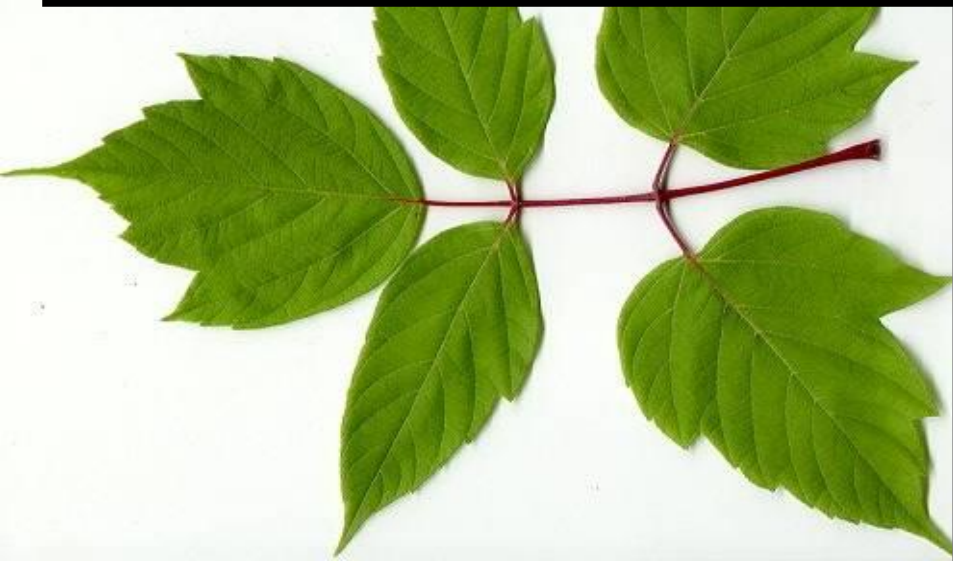
# **BINOMIAL COMPONENTS**





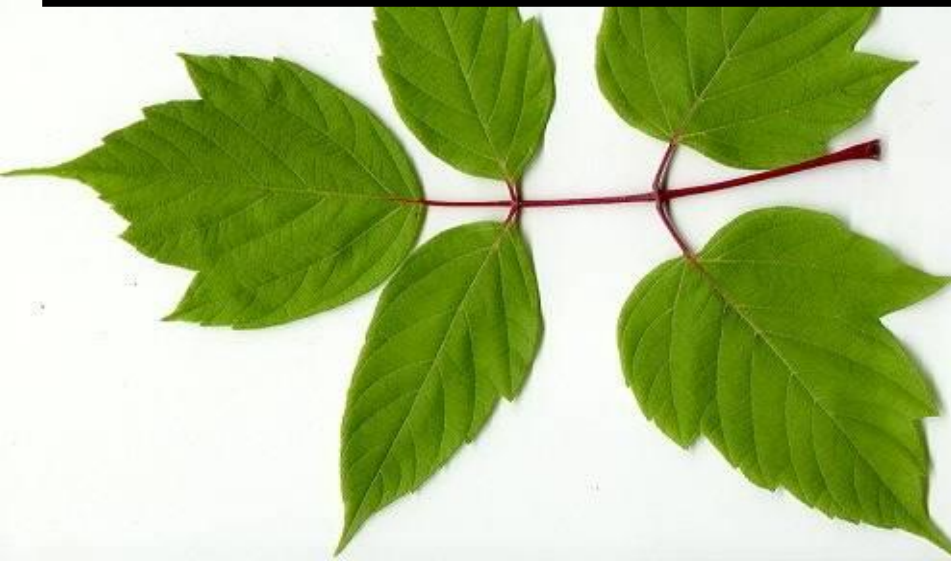


## **BOX-ELDER MAPLE**





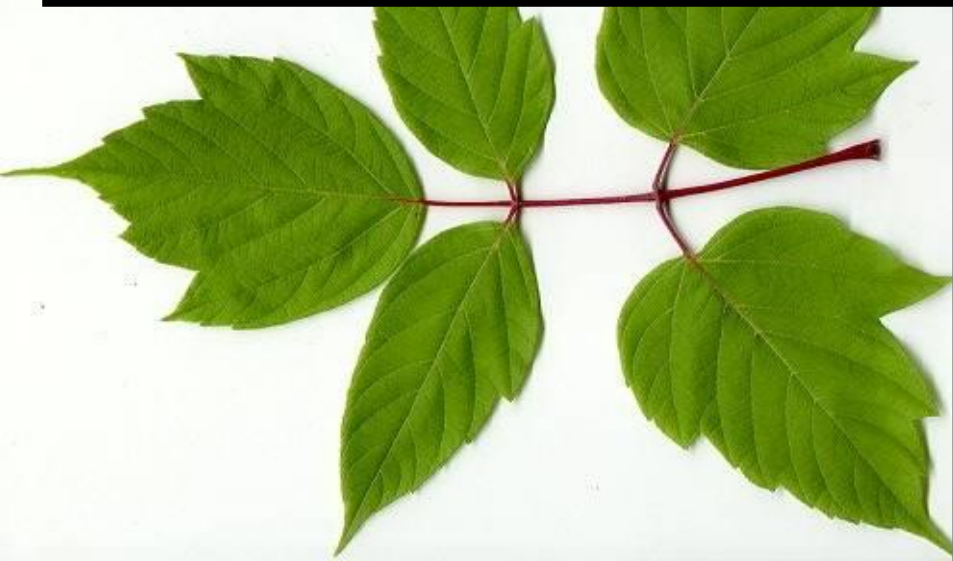
*Acer negundo* L.





GENERIC NAME

*Acer negundo* L.



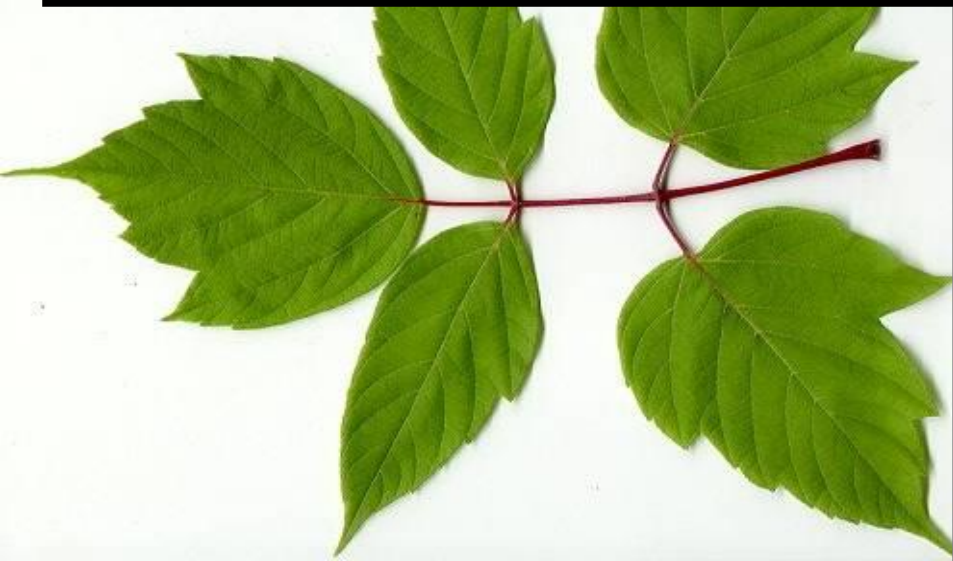


**B**

**GENERIC NAME**

*Acer negundo* L.

**SPECIFIC EPITHET**





GENERIC NAME

BINOMIAL

*Acer negundo* L.

SPECIFIC EPITHET





GENERIC NAME

BINOMIAL

AUTHORITY

*Acer negundo* L.

SPECIFIC EPITHET





GENERIC NAME

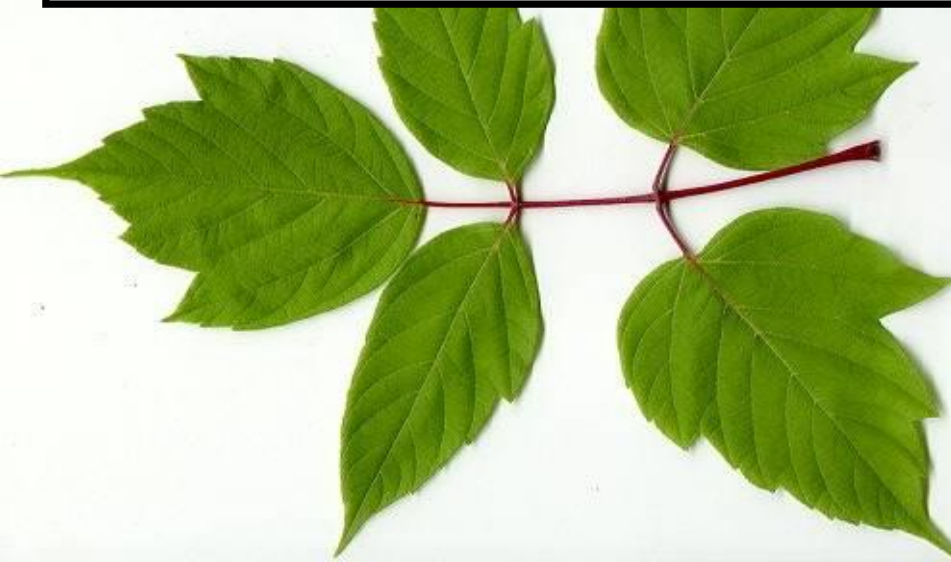
BINOMIAL

AUTHORITY

SPECIFIC EPITHET

*Acer negundo* L.

PUBLISHED  
BINOMIAL





GENERIC NAME

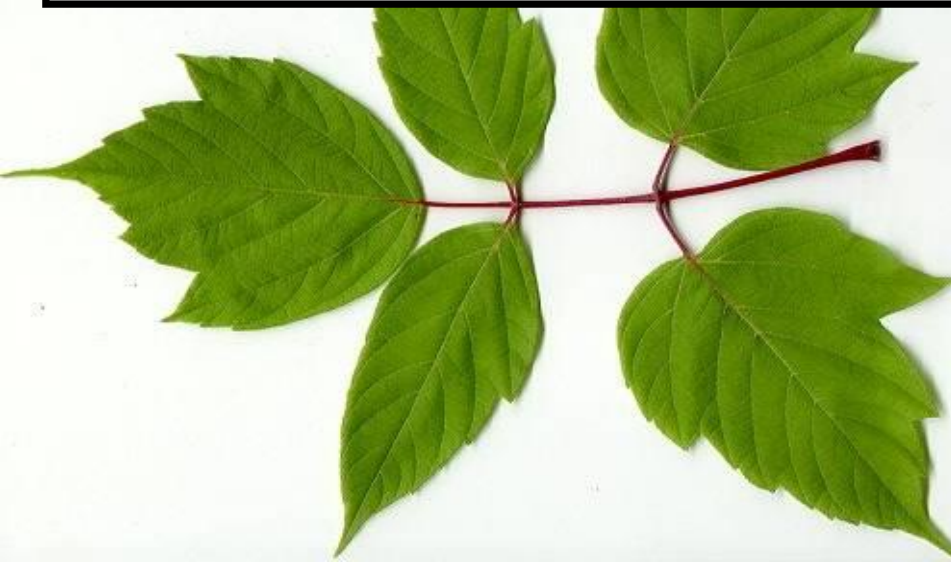
BINOMIAL

AUTHORITY

SPECIFIC EPITHET

*Acer negundo* L.

TYPICALLY  
ABBREVIATED





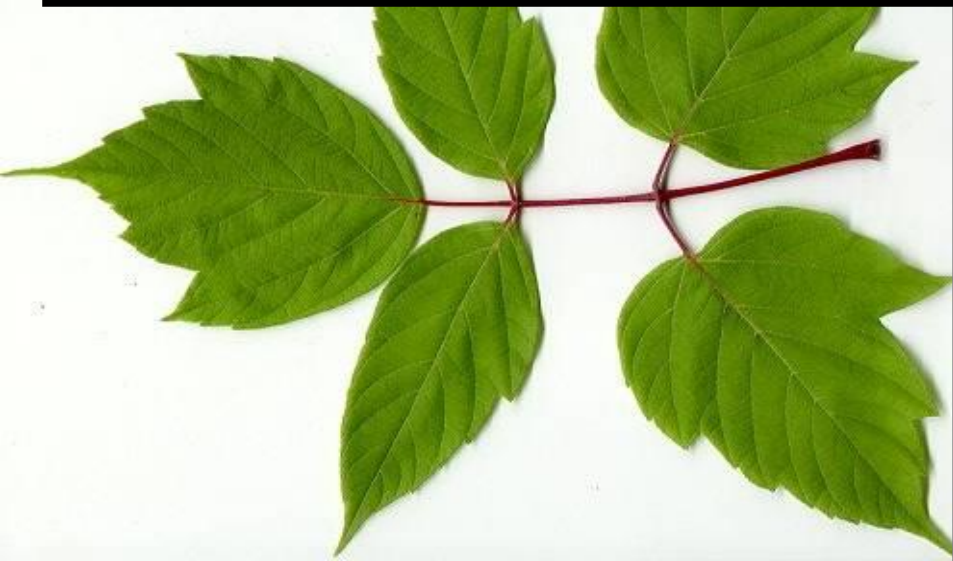


CARL LINNAEUS

*Acer negundo* L.



CARL LINNAEUS



# AUTHORITY TRANSFER

# AUTHORITY TRANSFER EXAMPLE



Convallaria racemosa L.

AUTHORITY TRANSFER  
EXAMPLE

*Convallaria racemosa* L.



*Convallaria racemosa* L.

BA

BASIONYM



**BASIONYM**



**BASIONYM**

**1<sup>ST</sup> PUBLISHED  
SPECIFIC EPITHET**

**BASIONYM**

**BASIONYM**

**1<sup>ST</sup> PUBLISHED  
SPECIFIC EPITHET**

**---**

**TRANSFERS WITH  
GENERIC CHANGE**

**BASIONYM**



# AUTHORITY TRANSFER EXAMPLE



Convallaria racemosa L.

AUTHORITY TRANSFER  
EXAMPLE

# AUTHORITY TRANSFER



## EXAMPLE

Convallaria racemosa L.

WAS TRANSFERRED

Smilacina racemosa (L). Link

# AUTHORITY TRANSFER

## EXAMPLE



**JOHANN LINK**



*Convallaria racemosa* L.



*Convallaria racemosa* L.



**CARL LINNAEUS**



**JOHANN LINK**



*Smilacina racemosa* (L.) Link



*Smilacina racemosa* (L.) Link



**CARL LINNAEUS**



**JOHANN LINK**



**PARENTHETICAL AUTHORITY**

*Smilacina racemosa* (L.) Link



*Smilacina racemosa* (L.) Link



**CARL LINNAEUS**

# **PARENTHETICAL AUTHORITY**



**PARENTHETICAL  
AUTHORITY**

**PUBLISHED**

**BASIONYM**

**=**

**racemosa**

**PARENTHETICAL  
AUTHORITY**



**JOHANN LINK**



**PARENTHETICAL AUTHORITY**

*Smilacina racemosa* (L.) Link



*Smilacina racemosa* (L.) Link



**CARL LINNAEUS**





**JOHANN LINK**



**PARENTHETICAL AUTHORITY**

*Smilacina racemosa* (L.) Link



**TRANSFER AUTHORITY**

*Smilacina racemosa* (L.) Link



**CARL LINNAEUS**

# **TRANSFER AUTHORITY**



**TRANSFER  
AUTHORITY**

**TRANSFERRED**

**Convallaria racemosa**

**TO THE GENUS**

**Smilacina**

**TRANSFER  
AUTHORITY**



**JOHANN LINK**



**PARENTHETICAL AUTHORITY**

*Smilacina racemosa* (L.) Link



**TRANSFER AUTHORITY**

*Smilacina racemosa* (L.) Link



**CARL LINNAEUS**