

CULTIVATED DICOTYLEDONOUS TAXA
AT THE NC STATE UNIVERSITY HERBARIUM II:
ADDITIONS TO THE COLLECTION IN 2002

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ABSTRACT

A list of cultivated dicotyledonous taxa added to the North Carolina State University Herbarium (NCSC) in 2002 is presented as part of a larger effort to catalogue the holdings of the herbarium. New additions include 24 families, 121 genera and 196 species added to the collection in 2002. Current holdings of dicotyledonous taxa held by NCSC comprise 121 families, 450 genera, and 1290 subgeneric taxa (species, varieties, cultivars).

Krings (2002) provided a list of cultivated dicotyledonous taxa currently deposited at the North Carolina State University Herbarium (NCSC) as part of a larger effort to catalogue all of the specimen holdings of NCSC. Fantz has begun the task in 2002 of vouchering the cultivated taxa at the JC Raulston Arboretum (JCRA) and the Greenhouse Conservatory of the Department of Horticultural Science as part of Hatch Research Project (NCO 6104). This has substantially increased the number of cultivated dicotyledonous taxa deposited at NCSC. The objective is to update the list of dicotyledonous taxa currently held at NCSC as a result of numerous additions made in 2002.

METHODS

Plant vouchers were prepared by Fantz following standard taxonomic vouchering procedures. Priority was given to collecting different species and those plants in the reproductive state. Lower priority went to multiple cultivars of a species. Vouchering of the

plants at the JC Raulston Arboretum began in April 2002. Vouchering of the Greenhouse Conservatory began in November 2002. Collection of duplicate specimens began in June 2002 after the North Carolina State University Herbarium (NCSC) developed an exchange program with the National Arboretum Herbarium (NA).

Labels were prepared for each voucher. Names were checked against Griffiths (1994) for current correct scientific names and authorities. The international plant name index database (The Plant Names Project 1999) was consulted for those names lacking in Griffiths (1994). Synonyms were included on plant labels. An alphabetical list of taxa was prepared that included correct scientific names, authorities, synonyms, voucher number, plant state (flowers, fruits, sori, cones) and herbarium of deposit.

A list of arboretum plant vouchers was turned over to Lasseigne, Assistant Director of the JC Raulston Arboretum, whose responsibilities include plant records. He is having the voucher data added to the JC Raulston Arboretum record database. A list of greenhouse vouchers were turned over to Diane Mays, Agricultural Research Technician II. She is adding voucher data to the greenhouse plant record database.

RESULTS

Twenty-four families, 121 genera, 196 species and 153 subspecific taxa of cultivated dicotyledonous vouchers were added to the NCSC herbarium in 2002 that represent new additions to the herbarium holdings. This represents an increase in one year of 24.7% new families, 36.8% of new genera, and 27% new subgeneric taxa added to the inventory reported by Krings (2002). Four new families added with limited taxa included Chloranthaceae R. Br. ex Lindley (5/65), Didiereaceae Drake (4/11), Nepenthaceae Dumort (1/70) and Stachyuraceae Agardh. (1/5) with the numbers represented by genera/species as reported by Mabberley (1987). Table 1 represents the ten largest families based upon the number of subgeneric taxa held

at NCSC, with the Asteraceae Dumort newly added. Table 2 represents the ten largest families based upon the number of genera represented in NCSU holdings.

TABLE 1. Ten largest families with number of cultivated subgeneric taxa at NCSC.

TABLE 2. Ten largest families with number of cultivated genera at NCSC.

Family	No. sub-generic taxa	Family	No. genera
Rosaceae	88	Fabaceae	32
Fagaceae	66	Rosaceae	28
Solanaceae	55	Asteraceae	24
Fabaceae	55	Rubiaceae	24
Aceraceae	46	Rutaceae	20
Oleaceae	42	Lamiaceae	13
Caprifoliaceae	38	Solanaceae	10
Betulaceae	34	Oleaceae	10
Asteraceae	32	Euphorbiaceae	9
Rutaceae	31	Caprifoliaceae	9

Verification of scientific names revealed a number of orthographic errors on plant labels and in plant records, use of synonyms, and phantom plants, the latter being plants in the collection but lacking in record databases. Lasseigne and Mays are correcting these errors in the databases and on new plant labels.

The new taxa additions are arranged below alphabetically by family, genus, species, and subspecific taxa. An asterisk (*) is placed after new families and genera not included in Krings (2002). The number of genera and subgeneric taxa follows family names (e.g., 8/13 indicates 8 genera comprising 13 subgeneric taxa). A scientific name not located in Griffiths (1994) nor The Plant Names Project

(1999) is cited as *nomina in schedula* [*nom. in sched.*].

ACANTHACEAE 8/13

*Acanthus**

A. spinosus L.

*Fittonia**

F. verschaffeltii (Lam.) Coem.

*Pachystachys**

P. lutea Nees

*Ruellia**

R. 'Tall Blue'

R. brittoniana Leonard 'Chi Chi'

R. brittoniana Leonard 'Katis'

R. graezcizans Backer

R. makoyana hort. Makoy ex Closon

*Thunbergia**

T. sp.

T. alata Bojer 'Sunny Orange

Wonder'

T. battiscombei Turrill

ACERACEAE 2/46

Acer

A. buergerianum Miq. var. *ningpoense* (Hance) E. Murray

A. campestre L. 'Nana'

A. japonicum Thunb. 'Aconitifolium'

A. palmatum Thunb. 'Hogyoku'

A. palmatum Thunb. 'Linearifolium'

A. palmatum Thunb. 'Pendulum Julian'

A. palmatum Thunb. 'Shishigashira'

A. palmatum Thunb. 'Willow Leaf'

A. shirasawanum Koidz. 'Aureum'

A. shirasawanum Koidz. 'Palmatifolia'

A. tataricum L. ssp. *ginnala* (Franch.) De Jong

A. tataricum L. ssp. *tataricum* 'Durand Dwarf'

AIZOACEAE* 2/2

*Delosperma**

D. sutherlandii (Hook. f.) N.E. Br.

*Faucaria**

F. tigrina (Haw.) Schwantes

AMARANTHACEAE* 1/1

*Alternanthera**

A. dentata (Moench) Scheygr.

'Rubiginosa'

A. dentata (Moench) Scheygr. 'Ruby'

ANACARDIACEAE 4/10

Cotinus

C. coggygria Scop. 'Black Velvet'

*Pistacia**

P. chinensis Bunge

APOCYNACEAE 7/7

*Adenium**

A. obesum (Forssk.) Roem. & Schult.

*Asclepias**

A. tuberosa L. ssp. *tuberosa*

AQUIFOLIACEAE 1/19

Ilex

I. 'Rock Garden'

I. cornuta Lindl. & Paxt. 'Sunrise'

I. verticillata (L.) A. Gray 'Winter Red'

ARALIACEAE 6/11

Hedera

- H. helix* L. [Adult form]
H. helix L. 'Glacier'
H. helix L. 'Oro Di Bogliasco'
- Polyscias***
P. fruticosa (L.) Harms 'Plumata'
P. guilfoylei (Bull) L.H. Bailey
 'Variegata'
- ASTERACEAE 24/32**
- Achillea***
A. millefolium L. Montrose Rose
 Group
- Artemisia***
A. ludoviciana Nutt. 'Valerie Finnis'
- Aster***
A. ericoides L. 'Schneegitter'
- Centrathermum***
C. camporum (Hassl.) Malme
- Chrysanthemum**
C. 'Country Girl'
C. weyrichii Miyake & Miyake
- Coreopsis***
C. auriculata L.
- Dahlia**
D. 'Fascination'
D. 'Great White'
D. 'Ibis'
D. 'Rosamunde'
D. 'Roxy'
D. 'Swan Lake'
- Echinacea***
E. purpurea (L.) Moench. 'Stewarts
 Pink'
E. tenesseeensis (Beadle) Small
- Kalimeris***
K. pinnatifida (Maxim.) Kit.
- Kleinia***
K. picticaulis (Bally) C. Jeffrey

- Leucanthemum***
L. x superbum (J. Ingram) Bergmans
 ex Kent 'White Knight'
- Ligularia***
L. hodgsonii Hook.
- Pseudogynoxys***
P. chenopodioides (Kunth) Cabr.
- Rudbeckia***
R. maxima Nutt.
- Senecio***
S. cineraria DC.
S. herreianus Dinter
S. serpens G. Rowley
- Thelesperma***
T. filifolium (Hook.) A. Gray var.
filifolium
- AUCUBACEAE* 1/1**
- Aucuba***
A. himalaica Hook. f. & Thomson
- BALSAMINACEAE* 1/1**
- Impatiens***
I. 'Pixie Burgany Rose'
- BEGONIACEAE* 1/1**
- Begonia**
B. 'Dels Semi-mini'
B. goegoensis N.E. Br.
- BERBERIDACEAE 5/12**
- Epimedium***
E. grandiflorum Morr. 'Rose Queen'
E. sempervirens Nak. ex Muekawa
E. x youngianum Fisch. & C.A. Mey.
- Mahonia**
M. gracilipes (Oliv.) Fedde

- Podophyllum***
P. pleianthum Hance
- BIGNONIACEAE 4/8**
- Campsis**
C. grandiflora (Thunb.) Schum.
- BORAGINACEAE 5/5**
- Omphalodes***
O. cappodocica (Willd.) DC. 'Starry
 Eyes'
- Pulmonaria***
P. officinalis L. 'Sissinghurst White'
P. saccharata Mill. 'Pink Dawn'
- Symphytum***
S. 'Goldsmith'
- BRASSICACEAE 5/6**
- Iberis**
I. sempervirens L. 'Purity'
I. sempervirens L. 'Snow White'
- BUXACEAE 2/8**
- Buxus**
B. 'Green Mountain'
B. bodinieri Leveille
B. harlandii Hance
B. himalayensis [nom. in sched.]
B. microphylla Sieb. & Zucc.
 'Sunnyside'
B. microphylla Sieb. & Zucc. var.
japonica (Muell.-Arg.) Rehd. &
 Wils.
B. sempervirens L. 'Jims True
 Spreader'
B. sinica (Rehd. & Wils.) M. Cheng
 var. *insularis* (Nakai) M. Cheng
- Sarcococca***

- S. saligna* (D. Don) Muell.
- CACTACEAE* 3/5**
- Epiphyllum***
E. phyllanthus (L.) Haw. var.
rubroconatum (Kimmnach) Dodson
 & A.H.Gentry
- Rhipsalis***
R. cereuscula Haw.
R. capilliformis F.A.C. Weber
R. pentaptera Pfeiff.
- Schlumbergera***
S. truncata (Haw.) Moran.
- CAMPANULACEAE* 2/2**
- Campanula***
C. takesimana Nak.
- Platycodon***
P. grandiflorus (Jacq.) A.DC. 'Misoto
 Purple'
- CAPPARIDACEAE* 1/0**
- Cleome***
C. 'Lindie Armstrong'
- CAPRIFOLIACEAE 9/38**
- Abelia**
A. x grandiflora (André) Rehd.
 'Conti' [Confetti™]
- Viburnum**
V. luzonicum Rolfe
- Weigela**
W. japonica Thunb. 'Darts Colour
 Dream'

CARYOPHYLLACEAE 5/10

Dianthus

- D.* 'Ron do Mai'
D. gratianopolitanus Vill.
D. superbus L. var. *longicalycinus*

CELASTRACEAE 2/8

Euonymus

- E. chinensis* Lindl.
E. europaeus L. 'Red Cascade'

Tripterygium*

- T. regelii* Sprague & Tak.

CHLORANTHACEAE* 1/1

Saracandra*

- S. glabra* (Thunb.) Nak.

CLETHRACEAE 1/3

Clethra

- C. alnifolia* L. 'Chattanooga'
C. alnifolia L. 'Pink Spires'

CORNACEAE 1/7

Cornus

- C. sanguinea* L. 'Midwinter Fire'

CRASSULACEAE* 4/7

Crassula*

- C. mucosa* L.

Echeveria*

- E. diffractens* M. Kimmach & A. Lau

Kalanchoe*

- K. diagremontiana* Hamet & Perrier
K. lateritia Engl.
K. milottii Hamet & Perrier

Sedum*

- S. pallidum* Bieb. var. *bithynicum*
 (Boiss.) Chamberi
S. tetractinum Froderstr.

DIDIEREACEAE* 1/1

Alluaudia*

- A. dumosa* Drake

ERICACEAE 9/28

Enkianthus

- E. campanulatus* (Miq.) Nichols
 'Winks Pink'
E. cernuus (Sieb. & Zucc.) Mak. f.
rubens (Maxim.) Ohwi 'Fuji'

Erica*

- E. x darleyensis* Bean 'Mediterranean
 Pink'

Macleania*

- M. bullata* Yeo

Pieris*

- P. japonica* (Thunb.) D. Don ex G.
 Don [Taiwanensis Group] 'Crispa'
P. multiflora [nom. in sched.]
P. phillyreifolia (Hook.) DC.

Rhododendron

- R. fortunei* Lindl.
R. hyperythrum Hayata
R. kiusianum Mak. 'Otome-no-Mai'
R. latoucheae Franch.
R. mucronulatum Turcz. var.
maritimum Nak.
R. schlippenbachii Maxim.
R. thymifolium Maxim. 'Alba'

Zenobia*

- Z. pulverulenta* (Bartr. ex Willd.) Pol-
 lard 'Woodlanders Blue'

EUPHORBIACEAE 10/18

Acalypha*

- A. hispida* Burm. f.

Codiaeum*

- C. variegatum* (L.) Bl. var. *pictum*
 (Lodd.) Muell. 'Nepenthifolium'

Euphorbia

- E. amygdaloides* L. var. *robbiae*
 (Turrill) Rad.-Sm.
E. fulgens Karw. ex Klotzsch.
E. grandicornis Goebel
E. leuconeura Welw. ex Hiern.
E. milii Desmoul.
E. opuntiioides Welw. ex Hiern.

Glochidion*

- G. triandrum* C.B. Robinson

Ricinus*

- R. communis* L. 'Carmencita'

FABACEAE 32/554

Genista*

- G. tinctoria* L. 'Flore Pleno'

Lespedeza*

- L. thunbergii* (DC.) Nak. 'Pink
 Fountain'

Thermopsis*

- T. villosa* (Walter) Fern. & Schubert

Wisteria

- W. frutescens* (L.) Poir.

FAGACEAE 5/66

Quercus

- Q. dentata* Thunb. 'Pinnatifida'
Q. germana Schlecht. & Cham.

FUMARIACEAE* 1/1

Dicentra*

- D.* 'Bacchanal'
D. eximia (Ker-Gawl.) Torr.

GENTIANACEAE 2/2

Gentiana*

- G. saponaria* L.

GERANIACEAE 3/6

Geranium*

- G.* 'Dilys'
G. x oxonianum Yeo. 'Claridge Druce'
G. x oxonianum Yeo. 'Wargrave Pink'
G. sanguineum L. 'Album'

Pelargonium

- P. x hortorum* L.H. Bailey

GESNERIACEAE* 4/3

Aeschynanthes*

- A.* sp.

Columnea*

- C.* 'Othello'

Nematanthus*

- N. glabra* [nom. in sched.]

Streptocarpus*

- S. nobilis* C.B. Clarke

GUTTIFERAE* 1/0

Hypericum*

- H.* 'Hidcote Variegated'

HIPPOCASTANACEAE 1/18

Aesculus

- A. parviflora* Walter 'Rogers'

HYDRANGEACEAE* 3/6

Dichroa**D. febrifuga* Lour.**Hydrangea****H. aspera* D. Don ssp. *sargentiana*
[nom. in sched.]*H. macrophylla* (Thunb.) Ser.*H. macrophylla* (Thunb.) Ser.
'Kardinal'*H. macrophylla* (Thunb.) Ser. 'Mowe'*H. macrophylla* (Thunb.) Ser. 'Tellers
Blue'*H. quercifolia* Bartr. 'Flemygea'
(Snow Queen™)*H. quercifolia* Bartr. 'Harmony'*H. serrata* (Thunb.) Ser. 'Wilson
7820'*H. serrata* (Thunb.) Ser.
'Woodlanders'**Schizophragma****S. integrifolium* Oliv.

ILLICIACEAE 1/4

Illicium*I. floridanum* Ellis 'Head-Lee
Compact'

ITEACEAE* 1/1

Itea**I. chinensis* Hook. & Arn.

LAMIACEAE 13/28

Clerodendranthus**C. spicatus* (Thunb.) C.Y. Wu &
H.W. Li**Lamiaeastrum****L. galeobdolan* (L.) L. 'Hermans

Pride'

Lavandula**L. angustifolia* Mill.**Nepeta****N. x faassenii* Bergmans ex Stearn
'Six Hills Giant'**Phlomis****P. fruticosa* L.*P. russeliana* (Sims) Benth.**Salvia***S. chamaedryoides* Cav.*S. greggii* A. Gray*S. integrifolia* Cav.*S. microphylla* Kunth 'Hot Lips'*S. microphylla* Kunth 'San Carlos
Festival'*S. microphylla* Kunth var. *neurepia*
(Fern.) Epling*S. reptans* Jacq.**Scutellaria****S. suffrutescens* S. Wats.**Thymus***T. serpyllum* L. 'Albus'

LAURACEAE 6/11

Persea*P. grijisii* (Hance) Kosterm.

LINACEAE* 1/1

Reinwardtia**R. indica* Dumont

LOBELIACEAE* 1/0

Lobelia**L. 'Knee Hi'*

LOGANIACEAE* 1/2

Buddleja**B. davidii* Franch. 'Bonnie'*B. x weyeriana* Weyer 'Honeycomb'

LYTHRACEAE 2/4

Cuphea**C. cyanea* Moc. & Sessé ex DC.**Lagerstroemia***L. 'Natchez'**L. subcostata* Koehne var. *fauriei*
(Koehne) Hatusima ex T. Yahara

MAGNOLIACEAE 4/26

Magnolia*M. sieboldii* K. Koch 'Colossus'**Manglietia****M. yunnanensis* Hu

MALVACEAE 9/16

Abelmoschus**A. manihot* (L.) Medik.**Abutilon****A. megapoticum* Mill. 'Little Imp'**Callirhoe****C. alcaeoides* (Michx.) A. Gray
'Logan Calhoun'*C. integrifolia* (Torr. & A. Gray) A.
Gray*C. involucrata* (Torr. & A. Gray) A.
Gray var. *tenuissima* Bak. f.**Hibiscus***H. 'Moy Grande'**H. syriacus* L. 'Oiseau Bleu'**Kosteletzkya****K. virginica* (L.) Presl ex A. Gray**Malvaviscus****M. arboreus* Cav. var. *drummondii*

(Torr. & A. Gray) Schery

Pavonia**P. lasiopetala* Scheele 'Bubba'

MELASTOMATACEAE 2/12

Monolena**M. primuliflora* Hook. f.

MORACEAE 6/10

Dorstenia**D. turnerifolia* Fish. & Mey.**Ficus****F. aspera* Forst. f.*F. deltoidea* Jack*F. vaccinioides* Hemsl. & King ex
King

NEPENTHACEAE* 1/1

Nepenthes**N. sp.*

OLEACEAE 10/42

Jasminum**J. beesianum* Forr. & Diels.**Ligustrum***L. japonicum* Thunb. 'Big Black Blue'*L. japonicum* Thunb. 'Hardy Small
Leaf'**Osmanthus***O. delavayi* Franch.

ONAGRACEAE 3/3

Fuchsia**F. sp.***Oenothera****O. macrocarpa* Nutt.

OXALIDACEAE* 1/1

Oxalis*

- O.* sp.
O. triangularis A. St.-Hil.
O. triangularis A. St.-Hil. ssp.
papilionacea (Hoffmanns.ex
Zucc.) Lourteig

PASSIFLORACEAE* 1/1

Passiflora*

- P. coriacea* Juss.

PIPERACEAE* 1/3

Peperomia*

- P.* sp. #8
P. clusiifolia (Jack) Hook.
P. elongata HBK.
P. obtusifolia (L.) Dietr.

POLEMONIACEAE 1/5

Phlox

- P. carolina* L. ssp. *angusta* Wherry
P. maculata L. 'Natascha'
P. subulata L. 'Laurel Beth'

RANUNCULACEAE 3/6

Aquilegia*

- A. 'Roman Bronze'
A. *grata* F. Maly ex Zimm

Clematis

- C. x eriostemon* Descne.
C. x eriostemon Descne. 'Mongolian
Gold'
C. 'Henry'
C. integrifolia L. 'Rosea'

RHAMNACEAE 4/5

Ceanothus

- C. x delilianus* Spach. 'Gloire de
Versailles'

Microrhamnus*

- M. franguloides* Maxim.

ROSACEAE 28/88

Neviusia*

- N. alabamensis* A. Gray

Potentilla*

- P. fruticosa* L. 'Maanelys'

Rosa*

- R. 'Cecile Brunner Bush'
R. 'Nastarana'

Rubus

- R. pentalobus* Hayata 'Emerald Car-
pet'

Spiraea

- S. japonica* L.f. 'Crimson Glory'
S. japonica L.f. 'Darts Red'
S. japonica L.f. 'Limemound'

Thalictrum*

- T. aquilegifolium* L.
T. kiusianum Nak.

RUBIACEAE 24/10

Cinchona*

- C. sp.

Gardenia*

- G. augusta* (L.) Merrill 'White Gem'

Ixora*

- I. chinensis* Lam.
I. taiwanensis 'Florida Tall' [*sp. nom.*
in sched.]

Pentas*

- P.* Benth. 'New Look Red'

Serissa*

- S. foetida* (L.f.) Lam.
S. foetida (L.f.) Lam. 'Kyoto'

RUTACEAE 20/31

x Citrofortunella*

- x *C. microcarpa* (Bunge) D.O.
Wijnands 'Variegata'

SAPINDACEAE 6/8

Koelreuteria

- K. paniculata* Laxm. 'Beachmaster'

SAXIFRAGACEAE 8/15

Rodgersia*

- R. sambucifolia* Hemsl.

Saxifraga

- S. stolonifera* Meerb. 'Maroon Beauty'

Tiarella*

- T. 'Mint Chocolate'

SCHISANDRACEAE* 1/1

Schisandra*

- S. grandiflora* Hook. & Thoms. var.
rubriflora (Rehd. & Wils.) Schneid.

SCROPHULARIACEAE 7/8

Diascia*

- D. barberae* Hook. f.

Penstemon*

- P. 'Evelyn'
P. 'Purple Tiger'
P. laevigatus Sol.

Torenia*

- T. fournieri* Lind. ex Fourn.

'Amethyst'

Verbascum*

- V. chaixii* Vill.

Veronica*

- V. forrestii* Diels
V. spicata L. 'Blue Wonder'

SOLANACEAE 10/55

Browallia*

- B. americana* L.

Calibrachoa*

- C. 'Million Bells'

Capsicum

- C. annuum* L. var. *annuum* 'Chilly
Chili'
C. annuum L. var. *annuum* 'Explosive
Baker'

Solanum

- S. dulcamara* L. 'Variegatum'

STACHYURACEAE* 1/1

Stachyurus*

- S. praecox* Sieb. & Zucc. var.
matsuzakii (Nak.) Mak. 'Magpie'

THYMELAEACEAE 3/5

Wikstroemia*

- W. terniflora* (Bur. & Franch.) Domke

ULMACEAE 7/26

Ulmus

- U. glabra* Huds. 'Camperdownii'

VERBENACEAE 6/17

Callicarpa

- C. dichotoma* (Lour.) K. Koch 'Issai'

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C. japonica Thunb. 'Leucocarpa'

C. formosana Rolfe

Caryopteris*

C. x clandonensis A. Simmons 'Worcester Gold'

Lantana*

L. trifoliata L.

Verbena

V. Tapien® Salmon

V. bonariensis L.

V. x hybrida Groenl. & Ruempl. 'Wildfire Purple'

V. tenuisecta Brq. 'Edith'

Vitex

V. agnus-castus L. 'Blushing Spire'

V. agnus-castus L. 'Shoal Creek'

V. incisa Lam.

V. rotundifolia L.f.

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