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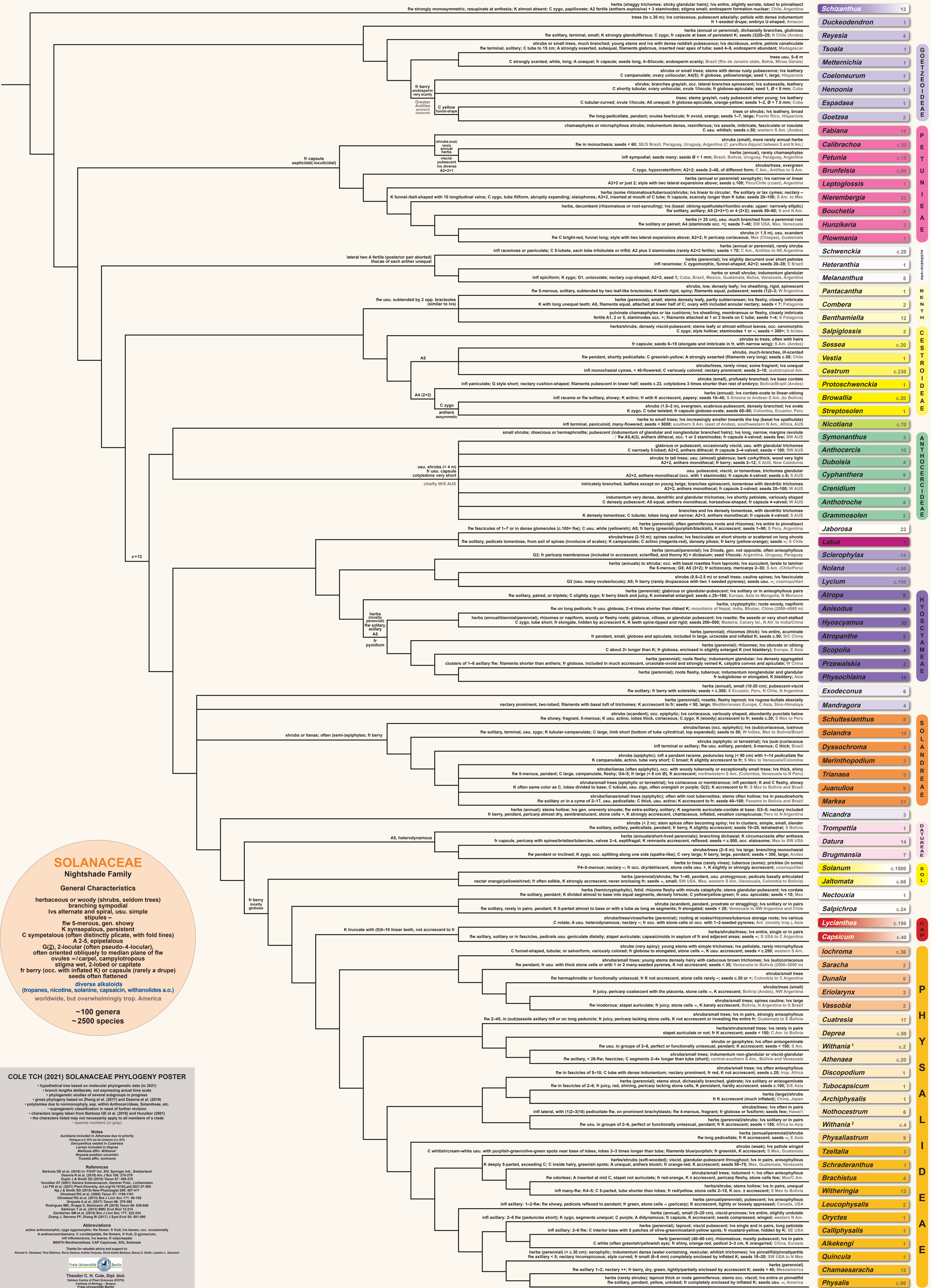


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SOLANACEAE PHYLOGENY POSTER



Genus	Species Count
Schizanthus	13
Duckeodendron	1
Reyesia	4
Toala	1
Metternichia	1
Ceoloneurum	1
Henonnia	1
Espadaea	1
Goetzea	2
Fabiana	15
Calibrachoa	c.30
Petunia	c.15
Brunfelsia	c.50
Leptoglossis	7
Nierembergia	23
Bouchetia	3
Hunzikeria	3
Plowmania	1
Schwencckia	c.20
Heteranthis	1
Melananthus	5
Pantacantha	1
Combera	2
Benthamiella	12
Salpiglossis	3
Sessea	c.20
Vestia	1
Cestrum	c.230
Protoschwenckia	1
Browallia	1
Streptosolen	c.20
Nicotiana	c.70
Symonanthus	2
Anthocercis	10
Duboisia	4
Cyphanthera	1
Crenidium	1
Anthotroche	4
Grammosolen	2
Jaborosa	22
Latua	1
Sclerophylax	14
Nolana	c.50
Lycium	c.100
Atropa	5
Anisodus	4
Hyoscyamus	32
Atropanthe	2
Scopolia	4
Przewalskia	2
Physochlaina	10
Exodeconus	6
Mandragora	4
Schultesianthus	8
Solandra	10
Dysoschroma	3
Merinthopodium	3
Trianaea	3
Juanulloa	9
Markea	21
Nicandra	3
Trompettia	1
Datura	14
Brugmansia	7
Solanum	c.1500
Jaltonata	c.68
Nectouxia	1
Salpichroa	c.24
Lycianthes	c.156
Capsicum	c.40
Iochroma	c.36
Saracha	1
Dunalia	5
Eriolarynx	3
Vassobia	17
Cuatrecasas	2
Deprea	c.50
Withania ¹	c.2
Athenaea	c.20
Discopodium	1
Tubocapsicum	1
Archiphysalis	1
Nothoestrum	6
Withania ²	c.4
Physalistrum	9
Tzeltalia	3
Schraderanthus	1
Brachistum	4
Witheringia	13
Leucophysalis	2
Oryctes	1
Alciphysalis	1
Alkekengi	1
Quincula	1
Chamaesaracha	12
Physalis	c.96

SOLANACEAE Nightshade Family

General Characteristics

- herbaceous or woody (shrubs, seldom trees)
- branching sympodial
- lvs alternate and spiral, usu. simple
- stipules -
- flw 5-merous, gen. showy
- K synsepalous, persistent
- C sympetalous (often distinctly plicate, with fold lines)
- A 2-5, epipetalous
- G(2), 2-locular (often pseudo-4-locular), often oriented obliquely to median plane of flw
- ovules -> carpel, campylotropous
- stigma wet, 2-lobed or capitate
- fr berry (occ. with inflated K) or capsule (rarely a drupe)
- seeds often flattened
- diverse alkaloids (tropanes, nicotine, solanine, capsaicin, withanolides a.o.)
- worldwide, but overwhelmingly trop. America

~100 genera
~2500 species

COLE TCH (2021) SOLANACEAE PHYLOGENY POSTER

• hypothetical tree based on molecular phylogenetic data (to 2021)
• branch lengths deliberated, not expressing actual time scale
• phylogenetic studies of several subgroups in progress
• gross phylogeny based on Zhang et al. (2017) and Deanna et al. (2019)
• polytomies due to nonhomoplasy, esp. within Antiochocercidae, Solandreae, etc.
• suprageneric classification in need of further revision
• characters largely taken from Barboza GE et al. (2016) and Hunziker (2001)
• the characters listed may not necessarily apply to all members of a clade
• species numbers (in grey)

Notes

- Auricularia included in Athenaea due to priority
- Borealis is not in the tribe Solanaceae
- Dryocorymbus nested in Cuatrecasas
- Larrea included in Deprea
- Melissaea affn. Withania¹
- Reyesia position uncertain
- Trochaea affn. Iochroma

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Abbreviations

actino actinomorphic; zygo zygomorphic; flw flower; fr fruit; lvs leaves; occ. occasionally
A androecium; C corolla; C2 corolla lobe; C3 corolla lobe; C4 corolla lobe; C5 corolla lobe; G gynoecium
inf inflorescence; lvs leaves; K calyx; K2 calyx lobe; K3 calyx lobe; K4 calyx lobe; K5 calyx lobe
BENTH Benthamiella; CAP Capsicaceae; SOL Solanaceae

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