

## **Key to Pepper Species**

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U.C. Davis. Glossary by Allen Boatman

A. Corolla solid color, white to waxy yellow green, without spots or other contrasting colors

B. Anthers pale blue to purple \*

C. Flowers solitary (sometimes 2 at first flowering node), white \*\*, calyx distinctly ridged, small teeth (less than 1 mm) at margin

***C. annuum***

CC. Flowers commonly 2-5 per node, corolla white to pale waxy green

D. Distinct annular constriction at the base of calyx, teeth minute, corolla white, pedicels variously curved.

***C. chinense***

DD. Calyx not constricted, teeth lacking, pedicels slender, stiffly erect at bud stage, corolla pale waxy green.

***C. frutescens***

BB. Anthers without anthocyanin, corolla white

C. Plants glabrous or nearly so, calyx tube heavily ridged, teeth as long as calyx tube filament bases with distinct appendages or "wings"

***C. chacoense***

CC. Plants pubescent, calyx without teeth, filament bases without appendages

***C. galapagoense***

AA. Corolla base with distinct single spot or continuous basal zone, anthers yellow (except *C. pubescens*).

B. Basal zone continuous

C. Corolla purple with white basal zone, plant pubescent, leaves rugose, seeds black.

***C. pubescens***

CC. Corolla yellow, basal zone chocolate, plant glabrous, leaves smooth, up to 15 flowers per node, seeds tan

**Ac. 393 (S.E. Peru)**

BB. Basal spots distinct, pale green or yellow

C. Corolla white to pale lavender to purple, spots pale green, seeds tan

D. Corolla lavender to purple,\*\*\* calyx teeth 1.2-1.8 mm.

***C. eximium***

DD. Corolla dirty white, plant pubescent

***C. eximium var. tomentosum***

CC. Corolla white or with purplish tint, spots pale green. Seeds black

D. Corolla white, calyx teeth indistinct

***C. schiottianum***

DD. Corolla white or with lavender tint, free portion of petals distinctly in-rolled, seeds black

***C. buforum***

AAA. Corolla lobes with 2 distinct spots at the base, seeds tan to brown

B. Corolla rotate

C. Petal segments distinct

D. Corolla white, spots pale green

***C. baccatum var. baccatum***

DD. Corolla white, spots yellow

***C. baccatum var. pendulum***

DDD. Outer margin to ½ of corolla lavender, leaves lightly rugose, moderately pubescent

***C. praetermissum***

CC. Petal segments indistinct, margin ruffled, points at petal intersection

**Ac. 1230 (Brazil)**

BB. Corolla urn shaped, cream to violet

C. Corolla urn shaped, cream to violet

***C. tovarii***

CC. Corolla campanulate, lavender

***C. cardenasii***

\* A *C. annuum* with yellow anthers has been seen.

\*\* *C. annuum* forms with anthocyanin in the leaves and stems also have lavender to purple flowers.

\*\*\* Flower color in wild *C. eximium* may range from typical lavender through various intergrades to purple. This is clearly the influence of natural hybridization with *C. pubescens*.

## **Glossary of terms used in the Key above**

Annular – in the form of a ring.

Anther – the part of a stamen that contains pollen.

Anthesis – the flowering period when the flower is fully expanded and functioning.

Anthocyanin – the dissolved coloring matter (glycoside pigments) in blue flowers.

Calyx – collective term for all the sepals of a flower.

Calyx Tube – a tube formed by the united bases of the sepals and partly by the receptacle.

Campanulate – Bell-shaped.

Constricted – Drawn together or narrowed.

Continuous – In botany, not deviating from uniformity; the reverse of interrupted.

Corolla – the collective name for all the petals of a flower.

Declined – curved downward.

Diffuse – widely or loosely spreading.

Erect – upright, upward, vertical, not declining or spreading.

Filament – the part of the stamen that supports the anther.

Glabrous – smooth. Having a surface without hair or down.

Inflorescence – the flowering part of a plant; the arrangement of flowers on a plant.

Margin – the edge of something. (i.e. Leaf margin = the edge of the leaf.)

Node – the place on a limb/stem where a leaf is, or was, attached. A bud exists at the leaf base or leaf scar, at a node. This bud is capable of becoming a root, shoot, or fruit (flower).

Pedicel – the stalk of a single flower in an inflorescence, or of a grass spikelet.

Peduncle – the stalk supporting a solitary flower or flower cluster.

Pubescence (pubescent) – In botany: 1. a covering of hair, as on the surface of

a leaf. 2. The state of having a covering of hair.

Revolute – With the margins, or edges, rolled back toward the underside.

Rotate - Describes a corolla that is wheel-shaped flat and circular in outline.

Rugose – crinkling, blistering, or blister like irregularities formed on the surface of a leaf. A rough leaf surface.

Sepal – one segment of the leaf like structure that protects the petals of a flower until it opens.

Solitary – occurring singly and not born in a cluster or group.

Urn Shaped – shaped like the container, usually like a vase with a pedestal, used for growing flowers.

