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## Solanum andreanum

Common Names Papa de vieja

**Code** adr

S. baezense, S. burtonii, S. correllii, S.

cyanophyllum, S. paucijugum, S. pichinchense, S. regularifolium, S.

serratoris, S. solisii, S. suffrutescens, S.

tuquerrense

Clade 3

**Synonyms** 

Series Tuberosa

**Ploidy** Diploid (2x), Tetraploid (4x)

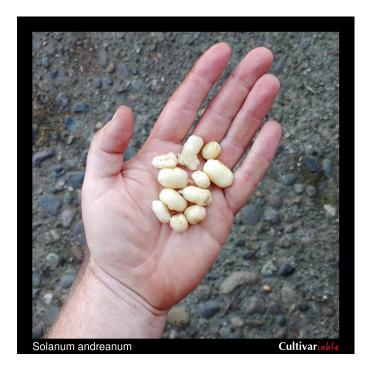
**EBN** 2

**Tuberization Photoperiod**Short Day

**Self-compatibility** No **Nuclear Genome** P

Cytoplasmic Unknown

Citation Baker: J. Linn. Soc., Bot. 20:498. 1884



### **Description**



Solanum andreanum distribution map

Solanum andreanum is a species found in Ecuador and Colombia, growing at elevations between about 11,500 and 13,000 feet. Plants a little more than a foot tall. Flowers large, purple. Tuber small, whitish, sometimes with purple eyes. The specific epithet, andreanum, honors French botanist E.F. Andre.

#### **Resistances**

Bethke (2017) scored wild potato species as a composite of seven resistance studies and *S. andreanum* (as *S. paucijugum*) ranked in second place.

Vega (1995) found that this species is less frost tolerant than domesticated potato.

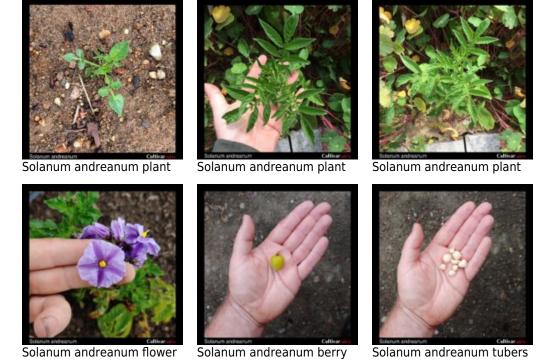
Chung (2011) found extreme variance in resistance in bacterial soft rot in this species. For accession PI 561650, which they identified as *S. paucijugum*, but was since reidentified as *S. andreanum*, they found the lowest level of lesion formation in the study. On the other hand, they found the highest level of lesion formation in the study for PI 320345.

Condition	Туре	Level of Resistance	Source	
<i>Alternaria solani</i> (Early Blight)	Fungus	Somewhat resistant	Jansky 2008	
<i>Globodera pallida</i> (Pale Cyst Nematode)	Invertebrate	Somewhat resistant	Castelli 2003 (as S. paucijugum)	
Globodera rostochiensis (Potato Cyst/Golden Nematode)	Invertebrate	Not resistant	Castelli 2003 (as S. paucijugum)	
Pectobacterium carotovorum (Blackleg/Soft Rot)	Bacteria	Resistant	Chung 2011 (as 5. paucijugum)	
Phytophthora infestans (Late Blight)	Fungus	Resistant	Gonzales 2002 (as S. paucijugum)	
Phytophthora infestans (Late Blight)	Fungus	Some resistance	Perez 2019	
Potato Virus Y (PVY)	Virus	Not resistant	Cai 2011	

# **Glykoalkaloid content**

No information.

## Images





Solanum andreanum flower

#### **Cultivation**

I have found this species slow to germinate using the standard conditions for *S. tuberosum*. The USDA Potato Genebank has observed that germination of some accessions of this species is inhibited by GA3 (Bamberg 1999).

Towill (1983) found that seeds of this species stored at 1 to 3 degrees C germinated at 12% after 12 years.

I have had a pretty difficult time getting plants of this species to tuberize. It appears to me that they form tubers much later than even most other short day species.

## **Breeding**

#### **Crosses with S. tuberosum**

Watanabe (1991) found that 13.9% of varieties of this species produced 2n pollen (calculated from the results for *S. andreanum* and *S. tuquerrense*, which has since been reclassified as *S. andreanum*), which would be effectively tetraploid and 4EBN.

Female	Male	Berry Set	Seed Set	Germ	Ploidy	Source
S. andreanum (including S. paucijugum, S. solisii, and S. tuquerrense)	S. tuberosum	None	None			Jackson (1999)
S. tuberosum 4x	S. andreanum (including S. paucijugum, S. solisii, and S. tuquerrense)	None	None			Jackson (1999)

### **Crosses with other species**

Jackson (1999) found 9-12% 2n pollen for varieties of this species.

Female	Eamala	Male	Berry	Seed	Germ	Ploidy	Source
	remale	Male	Set	Set			Source

### References

Solanum andreanum at Solanaceae Source

Solanum andreanum at GRIN Taxonomy

Solanum andreanum at CIP

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