



# Solanaceae Phenotype Ontology (SPO)

- › Mutants, germplasm, populations
- › Traits and phenotypes
- › Community-driven

<http://solgenomics.net>



**Stock details**

[New] [Edit] [Delete]

Organism **Solanum lycopersicum**  
Stock type **accession**  
Stock name **e0002m1**



**Ontology annotation**

[\[log-in to associate new ontology\]](#)

**solanaceae\_phenotype**

**Show complete**

has\_phenotype [homeotic mutation](#) (SP: [0000081](#))

inferred from mutant phenotype  
[Naama Menda](#) 2008-03-13

has\_phenotype [full sterility](#) (SP: [0000142](#))

inferred from mutant phenotype  
[Naama Menda](#) 2008-03-13



**Member phenotypes**

solcap fresh tomatoes 2010. Hutchinson Drive, Davis CA

<b>Fruit color</b>	<b>Average</b>	<b>Min</b>	<b>Max</b>	<b>Lines/repeats</b>
Cross section average 'a' value	28.08	19.17	37.03	10
Cross section average 'b' value	23.08	21.67	25.76	10
<b>Fruit longitudinal section</b>	<b>Average</b>	<b>Min</b>	<b>Max</b>	<b>Lines/repeats</b>
distal angle macro 20%	158.82	124.36	197.10	10
distal angle micro 2%	209.39	25.01	359.47	10
<b>Fruit cross section</b>	<b>Average</b>	<b>Min</b>	<b>Max</b>	<b>Lines/repeats</b>
fruit lobedness degree	1.68	0.78	4.17	10
pericarp area (square centimeter)	0.44	0.44	0.44	10
<b>Quality</b>	<b>Average</b>	<b>Min</b>	<b>Max</b>	<b>Lines/repeats</b>
pH	4.61	4.61	4.61	1
titratable acids (gram per deciliter)	0.33	0.33	0.33	1
total soluble solids	5.49	5.49	5.49	1
<b>Trait</b>	<b>Average</b>	<b>Min</b>	<b>Max</b>	<b>Lines/repeats</b>
days to first flowering	69.50	67.00	72.00	2
days to fruit ripening	123.00	122.00	124.00	2
distal fruit end scar size	14.80	13.40	16.20	2
<b>Qualitative Trait</b>	<b>Value</b>			
flower fasciation	absent, absent			
hypocotyl anthocyanin content	present, present			
inflorescence structure	intermediate inflorescence, simple inflorescence			
peduncle	absent, absent			
plant habit index	indeterminate, indeterminate			



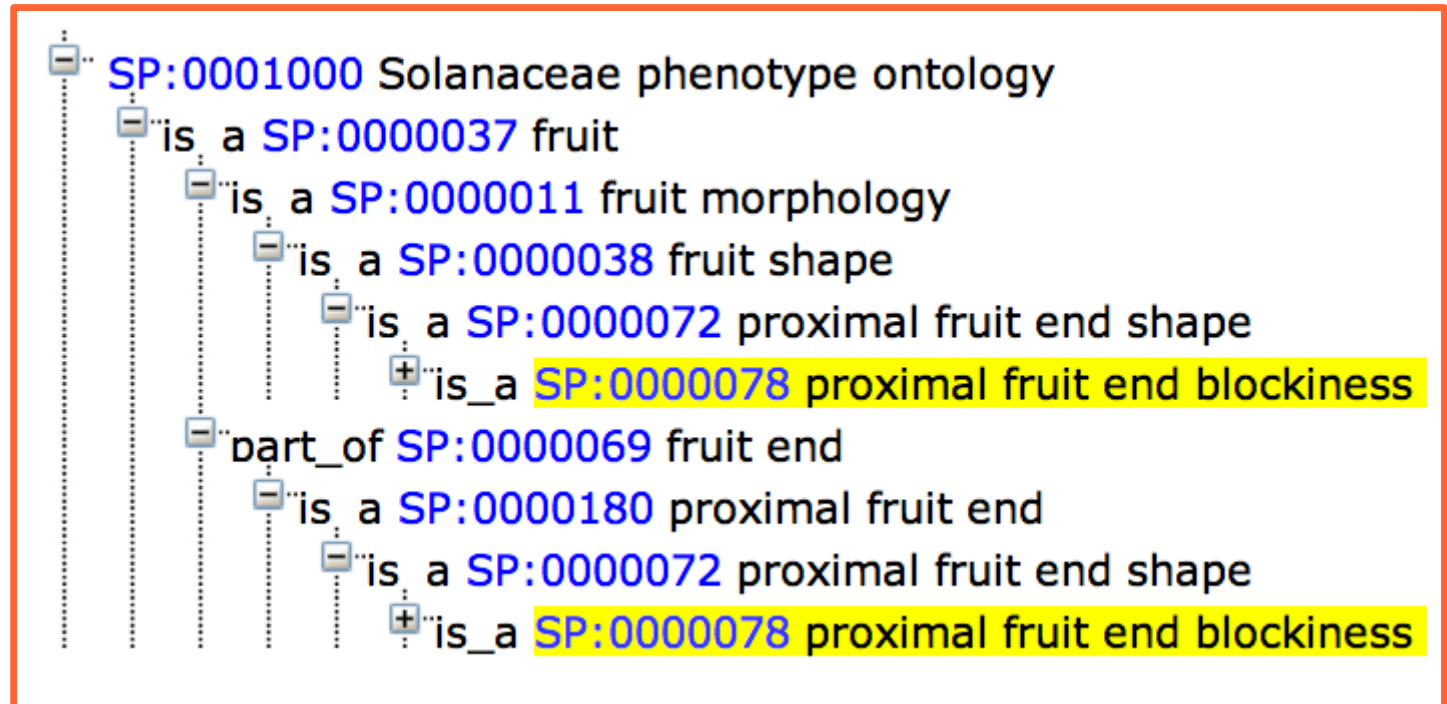
## SP:0000078 'proximal fruit end blockiness'

### Cvterm details

Term id **0000078**  
Term name **proximal fruit end blockiness**  
Term definition **Proximal fruit end proximal end width/mid width ratio.**  
Comment

### Definition dbxrefs

PATO:0001195  
PO:0007010  
PO:0007042  
PO:0008002





- is\_a SP:0000011 fruit morphology
  - SP:0001000 Solanaceae phenotype ontology
    - is\_a SP:0000089 fruit locule number
      - is\_a SP:0000038 fruit shape
        - + is\_a SP:0000070 distal fruit end shape
        - is\_a SP:0000173 fasciated
        - is\_a SP:0000103 fruit bumpiness
        - is\_a SP:0000050 fruit shape circular
        - + is\_a SP:0000058 fruit shape eccentric
        - is\_a SP:0000067 fruit shape ellipsoid
        - + is\_a SP:0000039 fruit shape index
        - is\_a SP:0000068 fruit shape rectangular
        - + is\_a SP:0000049 fruit shape triangle
        - is\_a SP:0000062 heart shape
        - is\_a SP:0000111 long fruit
        - + is\_a SP:0000072 proximal fruit end shape
        - is\_a SP:0000112 rounded fruit



Xiao et al., 2008



# SoICAP

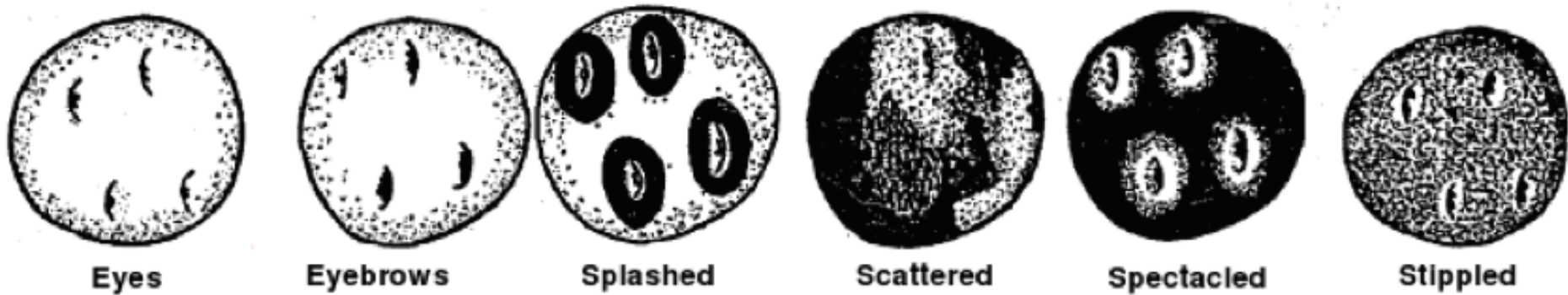
<http://solcap.msu.edu/>



## Solanaceae Coordinated Agricultural Project



Figure 13: Distribution of Secondary Skin Tuber Color



USDA: Potato description form



# Solanaceae Phenotype Ontology (SPO)

[solgenomics.net/search/phenotypes/traits](http://solgenomics.net/search/phenotypes/traits)

[ftp.solgenomics.net/ontology](ftp://solgenomics.net/ontology)

[plantontology.org](http://plantontology.org)

<http://www.croponontology-curationtool.org/>