



It's *already*  
in the mix™



frequently  
asked

questions

**sungro**  
HORTICULTURE

*Our Expertise is Growing®*

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## frequently asked questions

RESiLIENCE® is Sun Gro's name for growing mixes containing silicon, which is a natural and beneficial plant substance.



### How do I know that the silicon in RESiLIENCE® mixes is in the mix or if it is being taken up by the plant?

**A** The best way to know that RESiLIENCE® is in the mix is to observe plant responses, which vary among plant species and cultivars. Plant responses may include enhanced root growth, increased stem diameter and strength, improved drought tolerance and delayed wilting between waterings. (See table A. for a list of plant responses)



### Why do plant growth responses vary?

**A** Plants take up, accumulate and use silicon differently. The amount of silicon in the plant tissue does not necessarily relate to immediate, improved plant performance.

- Some plants efficiently use small amounts of silicon that they take up daily.
- Other plants take up and store silicon, utilizing it when exposed to stressful conditions.
- Certain plant species take up silicon rapidly when exposed to environmental stresses. In this case, RESiLIENCE® mixes are like an insurance policy... available when needed.



### Do RESiLIENCE® mixes provide silicon for the life of the plant?

**A** Our research with long term crops like poinsettias and mums has shown that plants were still accumulating silicon after 16-18 weeks.



### If I transplant RESiLIENCE® grown plants into bigger pots without using RESiLIENCE® mix, will silicon still benefit the plant?

**A** Once a plant takes up silicon, it stays in the plant and gets deposited in the cell structure. Silicon doesn't move around in the plant. As plants grow in RESiLIENCE® mixes, roots encounter and take up silicon. As the roots grow in the new (no silicon) mix, there is no silicon available to the new roots. The benefits of the original RESiLIENCE® mix will diminish because only the older part of the plant will have any silicon available.



### What is the shelf life of silicon in the packaged growing mix?

**A** RESiLIENCE® mixes have the same recommended shelf life as our former non-silicon mixes.



### Are there plant phytotoxicity issues?

**A** RESiLIENCE® mixes have been tested across a wide number of plant species and have been shown to have an excellent record of positive plant growth.



### Are fruits and vegetables from RESiLIENCE® grown plants, like tomatoes, okay for humans to eat?

**A** Silicon is naturally occurring and is the second most abundant element in the earth's crust, so all plants may take up silicon from the soil. Fruits and vegetables from plants grown in RESiLIENCE® mixes would be okay for consumption as those grown in your garden soil.



### Is there silicon in non-RESiLIENCE® mixes?

**A** Silicon is present in some growing media components. The amount of silicon in these components is not at an adequate level to provide the benefits obtained with RESiLIENCE® mixes which contain an increased amount of silicon necessary to boost plant performance.



# frequently asked questions

## Plants Exhibiting Positive Growth Responses in Peat and/or Bark RESILIENCE® Mixes

Plant Botanical Name	Plant Common Name	Better Rooting	Resistance to Wilt	Thicker Stems	Earlier Flowers	Compact Growth
<b>Annuals*</b>						
<i>Angelonia angustifolia</i> Serena® Blue	Summer Snapdragon	●	●	●	●	
<i>Antirrhinum majus</i> Twinky™ F1 Violet	Snapdragon	●		●		
<i>Begonia semperflorens</i> Bada Bing® Scarlet	Begonia	●		●	●	●
<i>Calibrachoa</i> Callie® Mango	Calibrachoa	●	●	●	●	●
<i>Catharanthus roseus</i> Nirvana® Violet	Vinca		●	●		●
<i>Catharanthus roseus</i> Nirvana® Pink Blush	Vinca				●	
<i>Cucumis sativus</i> 'Straight Eight'	Cucumber	●	●	●		●
<i>Dahlia</i> Figaro® Yellow Shades	Dahlia	●	●	●		●
<i>Gerbera jamesonii</i> Jaguar™ Rose Dark Center	Gerber Daisy		●	●	●	●
<i>Helianthus annuus</i> F1 Sunny Smile™	Sunflower	●	●	●	●	●
<i>Impatiens hawkerii</i> Sonic® Amethyst	New Guinea Impatiens		●			●
<i>Impatiens walleriana</i> Accent™ Premium Deep Orange	Impatiens	●	●	●		
<i>Lantana camara</i> Bandana® Rose	Lantana	●	●	●		
<i>Ocimum basilicum</i> 'Genovese'	Basil	●	●			●
<i>Osteospermum ecklonis</i> Akila® Purple	African Daisy		●			
<i>Pelargonium</i> Calliope® Large Scarlet Fire	Geranium	●		●	●	●
<i>Pentas lanceolata</i> Graffiti® Bright Red	Pentas	●		●		●
<i>Petunia</i> Dreams™ Midnight	Petunia	●	●	●		
<i>Salvia splendens</i> Mohave Red	Salvia	●	●	●		●
<i>Scaevola aemula</i> Bombay® Dark Blue Imp.	Fan Flower				●	
<i>Solenostemon scutellarioides</i> 'Rose to Lime Magic'	Coleus	●	●	●		●
<i>Tagetes erecta</i> MoonSong®	African Marigold			●		
<i>Tagetes patula</i> Disco Marietta	French Marigold	●	●	●		
<i>Torenia fournieri</i> Kauai™ Deep Blue	Clown Flower		●		●	●
<i>Verbena</i> Lanai® Red	Verbena		●		●	●
<i>Zinnia elegans</i> Magellan® Yellow	Zinnia		●	●	●	●
<i>Zinnia elegans</i> Uproar™ Rose	Zinnia		●			
* Plants grown from plug to finished in 1 L (4.5") pots						
<b>Perennials*</b>						
<i>Chrysanthemum</i> Padre Yellow	Belgian Mum	●	●			●
<i>Coreopsis verticillata</i> 'Moonbeam'	Coreopsis				●	●
<i>Delphinium elatum</i> Aurora™ Blue	Delphinium	●	●	●	●	●
<i>Digitalis purpurea</i> Dalmation Purple	Foxglove	●	●	●		●
<i>Leucanthemum x superbum</i> 'Real Glory'	Shasta Daisy	●	●	●		●
<i>Echinacea purpurea</i> 'Leuchtstern' (Bright Star)	Purple Coneflower	●				
<i>Phlox paniculata</i> 'Laura'	Garden Phlox	●	●	●	●	●
* Plants grown from plugs in 1 gallon pots in the greenhouse						
<b>Plugs*</b>						
<i>Brassica oleracea</i> var. <i>Italica</i>	Broccoli	●	tbd*	●	tbd*	●
<i>Brassica oleracea</i> var. <i>gemmifera</i>	Brussels Sprouts	●	tbd*		tbd*	
<i>Brassica oleracea</i> var. <i>capitata</i>	Cabbage	●	tbd*	●	tbd*	●
<i>Brassica oleracea</i> var. <i>botrytis</i>	Cauliflower	●	tbd*	●	tbd*	●
<i>Capsicum annuum</i> 'Tomcat'	Pepper	●	tbd*	●	tbd*	●
<i>Gerbera jamesonii</i> Jaguar™ Red	Gerber Daisy					●
<i>Lactuca sativa</i> 'Green Towers'	Romaine Lettuce		●			●
<i>Lycopersicon esculentum</i> 'Bobcat'	Tomato	●	tbd*		tbd*	
<i>Pelargonium</i> Darko® Deep Red	Geranium	●	tbd*	●	tbd*	●
<i>Pelargonium</i> Darko® Standard Pink	Geranium	●	tbd*	●	tbd*	
<i>Petunia</i> Storm™ Salmon	Petunia					●
<i>Zinnia elegans</i> Magellan® Cherry	Zinnia	●	tbd*		tbd*	●
<i>Zinnia elegans</i> Magellan® Salmon	Zinnia					●
* Plugs grown from seed or cuttings (geranium) in 288 or 105 cell plug trays.						
<b>Vegetable Starts*</b>						
<i>Capsicum annuum</i> 'Tomcat'	Pepper - bell	●	tbd*	●	tbd*	●
<i>Cucumis melo</i> 'Athena'	Cantaloupe	●	tbd*	●	tbd*	●
<i>Cucurbita pepo</i> 'Enterprise'	Summer Squash	●	tbd*		tbd*	●
<i>Cucurbita pepo</i> 'Spineless Beauty'	Zucchini	●	tbd*	●	tbd*	
<i>Ocimum basilicum</i> 'Genovese'	Basil	●	tbd*	●	tbd*	●
* Plants grown from seed in jumbo 6-packs						