

Western Flower Thrips Feeding Scars and Tospovirus Lesions on Petunia Indicator Plants

Michael J. McDonough,

Graduate Student Department of Horticulture

Daniel Gerace,

Research Fellow Department of Entomology

Mark E. Ascerno,

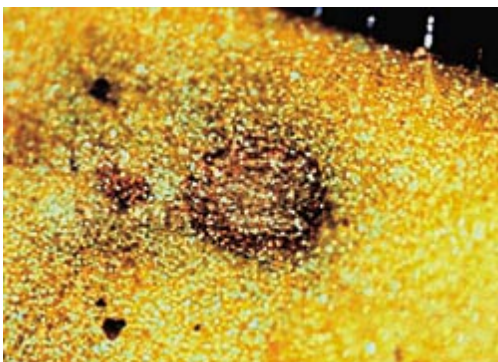
Extension Entomologist and Department Head Department of Entomology

◆ 2006 Regents of the University of Minnesota. All rights reserved.



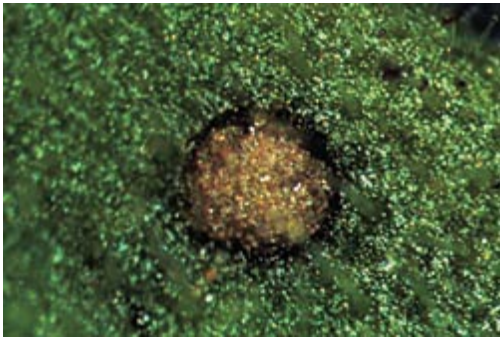
Lesions on petunia leaves caused by the feeding of western flower thrips (WFT).

- The white lesions on the right leaf are caused by WFT that are not carrying the tospovirus.
- The dark lesions on the left leaf are caused by WFT that are carrying the tospovirus.



A closer look at a tospovirus lesion as it first appears on the petunia leaf.

An older lesion on a petunia leaf. As the lesion ages, its center changes from black to tan.



From, Robb, K. L., C. Case, A. Whitfield, and L. Campbell. 1998. A new weapon to fight INSV and TSVW. *Grower Talks* 61(12): 63-73. Photographs by Jack Kell Clark; used with permission.

Table 1. Host plants for tospoviruses TSWV and INSV listed by greenhouse crop type.

	<u>TSWV</u>	<u>INSV</u>		<u>TSWV</u>	<u>INSV</u>		<u>TSWV</u>	<u>INSV</u>
<u>Bedding Plants</u>			Weeping fig	+		Rhododendron	+	
Begonia	+	+	Zebra plant		+	Ruscus		+
Blue dais	+		<u>Non-Ornamentals</u>			Schianthus	+	+
Browallia		+	Broadbean	+		Snapdragon		+
Caladium		+	Celer	+		Statice	+	
Celosia		+	Endive	+		Stephanotis	+	+
Coleus		+	Garden bean	+		Streptocarpus	+	+
Dahlia	+	+	Lettuce	+		Thanksgiving cactus		+
Dust miller		+	Pepper	+	+	<u>Perennials</u>		
Eggplant	+	+	Spinach	+	+	Ajuga		+
Fuschia	+		Tarragon		+	Aster	+	
Gaania	+	+	Tomato	+	+	Barberr		+
Geranium	+	+	African violet	+	+	Bee balm		+
Gomphrena		+	Alstromeria	+	+	Bishop's weed		+
Impatiens	+	+	Amaon lil		+	Black-eed susan		+
Lobelia	+	+	Amarllis	+	+	Campanula		+
Maltese cross		+	Anemone		+	Catnip		+
Marigold		+	Anthurium	+	+	Columnea	+	+
Moss rose	+	+	Ardisia	+	+	Delphinium		+
Nasturtium		+	Asiatic lil	+	+	English dais		+
New Guinea Impatiens		+	Bromelia	+		Forget-me-not		+
Petunia	+	+	Calceolaria		+	Fo"glove		+
Phlo"		+	Calla lil	+		Gaillardia	+	
Salvia	+	+	Chrsanthemum	+	+	Gentian		+
Sea lavender	+		Clivia	+		Hosta		+
Star of Bethlehem	+		Cclamen	+	+	Osteospermum	+	
Stock		+	Eucharis	+		Pentstemon		+

Strawflower	+	+	Eucalyptus	+	Peon	+
Swan River dais			Florist's cineraria	+	Phostegia	+
Verbena		+	Gardenia	+	Polemonium	+
Zinnia		+	Gerbera	+	Popp	+
<u>Foliage plants</u>			Gladiola	+	Red Valerian	+
Arrowhead vine		+	Glossinia	+	Sedum	+
Bird's Nest fern			Hoa		Shasta dais	+
Chinese evergreen	+	+	Hdrangea	+	Turtlehead	+
Cordline	+	+	Lantana	+	Veronica	+
Dieffenbachia	+		Lipstick plant		Vinca	+
Dracaena	+	+	Lisianthus	+	<u>Weeds</u>	
Japanese aralia	+		Mother of thousands		Bittercress	+
Kalanchoe	+	+	Oncidium	+	Chickweed	+
Maranta	+	+	Oxalis		Dandelion	+
Oleander	+		Peace lil	+	Field bindweed	+
Pedilanthus		+	Peperomia	+	Galinsoga	+
Piggyback plant		+	Phalaenopsis	+	Horseweed	+
Pothos		+	Primula	+	Jewelweed	+
Rubber tree	+	+	Rain dais	+	Lamb's quarters	+
Schefflera		+	Ranunculus	+		
Swedish Iv		+				
Tradescantia		+				

IN PARTNERSHIP ...

College of Agricultural, Food,
and Environmental Sciences
UNIVERSITY OF MINNESOTA

UNIVERSITY OF MINNESOTA
Extension
SERVICE

Produced by Communication and Educational Technology Services, University of Minnesota Extension Service.

In accordance with the Americans with Disabilities Act, this material is available in alternative formats upon request. Please contact our University of Minnesota Extension Service office or the Distribution Center at (800) 876-8636.

The University of Minnesota Extension Service is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.