



Gladiolus Thrips, *Thrips simplex* (Morison)¹

H. A. Denmark and J. F. Price²

Introduction

The gladiolus thrips was described Morison (1930) as *Physothrips simplex* from five female specimens collected on carnation flowers, *Dianthus caryophyllus*, from Urrbrae, South Australia. The holotype and one paratype are deposited in the British Museum. Moulton and Steinweden (1931) described this thrip under the name *Taeniothrips gladioli* from Ontario, Canada, and it was synonymized by Steele (1935). Bhatti (1969) placed *gladioli* in the genus *Thrips*. Kellie O'Neill of the U.S. National Museum (retired) has suggested that this thrips probably originated in Africa as did its preferred host, gladiolus, *Gladiolu x hortulanus*. It causes deformities and discoloration of gladiolus flowers (Figure 1), and corms (bulbs) (Figure 2) become soft and are prone to decay.

Distribution

Gladiolus thrips is widespread and is found where gladiolus are grown in Africa, Asia, Australia, the Pacific Islands, Europe, and North and South America. It is found in almost all states in the United



Figure 1. Gladiolus bloom damage (on right), produced by gladiolus thrips, *Thrips simplex* (Morison), feeding. Credits: Division of Plant Industry

States. Although it cannot overwinter out-of-doors in northern Europe and northern North America, the spread of this thrips probably results from its infested corms being shipped to all parts of the country. It was first found in Florida in 1932 (Watson 1941).

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2. H. A. Denmark and J. F. Price, Entomology and Nematology Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL 32611.

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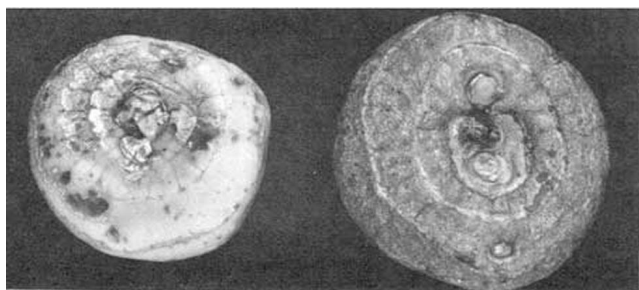


Figure 2. Gladiolus corm on right showing advanced stage of injury by gladiolus thrips, *Thrips simplex* (Morison). Credits: Division of Plant Industry

Description

Adults emerge milky-white, but soon turn brown and begin feeding. The female is approximately 1.65 mm long and slightly larger than the male (Figure 3). The antennae are dark brown except for the 3rd segment which is light brown. The wings have a light transverse band near the base. The egg is about 0.3 mm long, opaque white, smooth, and bean-shaped. Eggs are deposited in the leaf tissue and corms. The two larval stages are light yellow and are usually found beneath the leaves or bracts. The fully developed 2nd instar larva is about the size of the adult. The 1st pupal stage is distinguished from the 2nd pupal stage by having forward projecting antennae and short wing pads. The 2nd pupal stage, which is a quiescent period, has the antennae folded over the back and much longer wing pads.

Host Plants

The thrips feed and reproduce primarily on gladiolus flower spikes and corms; however, it has been recorded from *Philodendron selloum*, *Clitoria* sp., *Rhododendron indicum*, *Calendula*, and crow-foot grass, *Eleusine indica*. This thrips has never been reared from these plants and they cannot be considered valid hosts. It was reported to reproduce on *Tritonia* sp., *Tigridia* sp., and *Kniphofia* sp.

Management

Several insecticides can be used to suppress gladiolus thrips.

Insect Management Guide for Gladiolus



Figure 3. Adult female gladiolus thrips, *Thrips simplex* (Morison). Credits: Division of Plant Industry

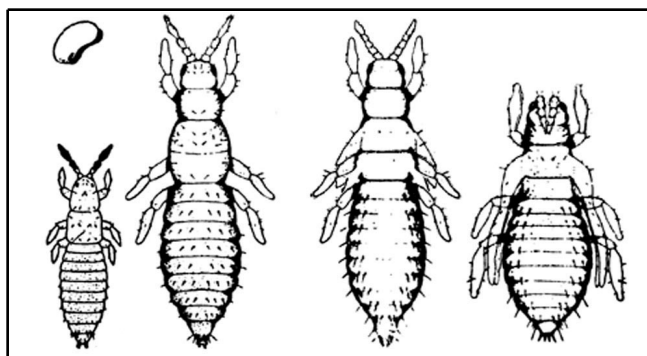


Figure 4. From left to right: egg and first larval stage, second larval stage, first pupal stage, second pupal stage. Credits: Division of Plant Industry

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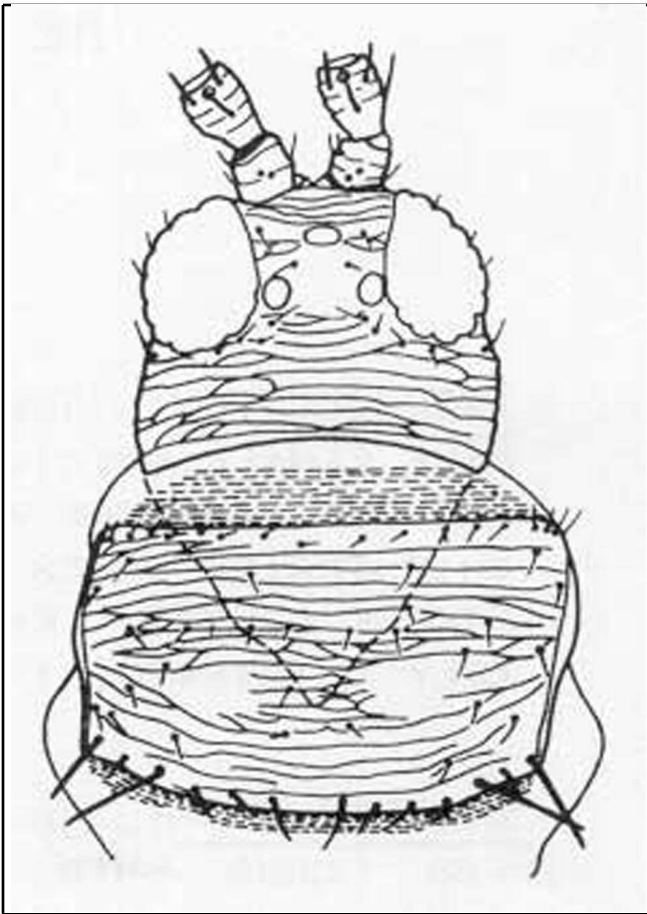


Figure 5. Head and prothorax of the gladiolus thrips, *Thrips simplex* (Morison), showing setae. Credits: Division of Plant Industry

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