

New York State Flower Growers

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We Still have Red Spiders

J. A. Naegele and David L. Watson
Department of Entomology
Cornell University

The rose growers' constant companion and public enemy number 1 still continues to be the red spider mite. While this pest's importance is primarily due to the extreme difficulty experienced in obtaining control because of "resistance," some of the control failure still lies in the realm of careless or indifferent applications and the lack of a conscious awareness of the problem.

Although phosphate resistance is sufficiently widespread to force many growers to abandon such phosphates as TEPP, HETP, Parathion, EPN, Malathion and Dithio because of their failure to afford practical control, some growers still continue to achieve successful control with these materials. This situation appears at first to be contradictory to common experience but does find some explanation in the attitude of growers still successfully using the phosphates. The general opinion among these growers is one of constant vigilance and repeated applications of the insecticide they are currently using. Rather than wait for a large infestation of spiders to appear, they have chosen to apply the insecticide at periodic predetermined intervals or whenever there was even the slightest suggestion of the presence of the two-spotted mite.

In those ranges where phosphate resistance has become prevalent, Aramite sprays, aerosols, or steam pipe applications have been employed. At the present time, Aramite is being successfully used by a majority of the growers in the country. In this case also, those who claim the greatest success are those who have put on several closely timed applications in an attempt to achieve complete cleanup of the mite population.

In an isolated number of cases, Aramite resistance has also appeared. In these cases, many growers have switched to Chlorobenzilate while others have found certain sequences of materials to be quite effective.

In controlling Aramite and phosphate resistant mites a sequence of one Aramite application followed by two dithio treatments has proven successful. The

Aramite treatment is followed in two days by a Dithio treatment and again in six days by another Dithio treatment. This sequence of treatments has not eliminated the red spider problem but it has proven adequate for a period of approximately two years after Aramite resistance first appeared. When this sequence failed to give control, certain other combinations provided control. These combinations were: 10% Chlorobenzilate plus 10% Demeton, 10% Chlorobenzilate plus 10% OMPA, and 10% Chlorobenzilate followed by three 10% Dithio applications within two weeks. Preliminary information also indicates that 10% Chlorobenzilate plus 15% Meta-Systox will provide adequate control; whereas, 10% Chlorobenzilate plus 10% Meta-Systox did not provide practical control. Virtually all of this experimental work has been done with aerosols because of their convenience and economy.

Because of the many different mite strains now present and because of our limited knowledge of all the possible reactions of these mite strains, we can only offer these suggestions as general guides for your consideration. They have proven successful under the experimental program carried out at Elmira.

Resistance is not the only reason for control failure in two-spotted mite populations. While it may be the most general reason for poor control, there are other considerations which may affect the control efficiency.

Careless application techniques, such as poor distribution, inadequate coverage, low dosage, failure to close the vents, drafts caused by broken glass, open doors or ventilators, applications on windy days, too much spreader and many others also affect control efficiency. In many cases careful attention to the details of insecticide application have been neglected.

Above all, however, it is absolutely necessary to be continually conscious of the red spider problem. When this attitude is adopted by the boss, it can then be instilled in the growers so that initial light pockets of infestation, not easily noticeable, will be recognized and vigorous efforts made to eliminate them.