

C. **Apple (Royal Gala):**
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European Red Mite: *Panonychus ulmi*
Sipcam Experimental Service

This trial was conducted to test the efficacy of GC-Mite under field conditions for the control of European red mite on apple, and to verify GC-Mite activity, phytotoxicity on apple tree against European Red Mite.

Materials and methods

The trial was set up at Trento, Italy. The trees were four years old, apple Royal Gala variety for the GC-Mite efficacy in comparison to different acaricides. Plots of three trees at four replications and one application. A completely randomized design was employed, trees were marked out. Treatments were assigned to individual trees by random and marked with colored flags. Treatments included a control with no treatment, Metacar (hexythiazox 105 WP) 50 g FP per 100 gallon water / acre, Metacar (hexythiazox 105 WP) 50 g F.P and Biolid E (mineral oil 80 % E0 per 100 gallon water / acre and Metacar (hexythiazox 105 WP) 50 g FP +GC-Mite 1 % per 100 gallon water / acre. Applications were made with a motor powered sprayer. All applications were applied to the point of run-off, approximately 100 gallons per acre.

Results

Metacar + GC-Mite comparison with chemical standard miticides. After 71 days the, Metacar = GC-Mite treatment in comparison with other treatments and control showed that good activity when tested. No phytotoxicity was observed at any assessment timings. Table (1) the average movable (*P.ulmi*) stages when treated with, Metacar + GC-Mite and other standard miticides.

Date of application	Aug.24 – T +43 days	Sept.5th – T+ 55 days	Sept.21st – T + 71 days
Control	26.4	36.4	45.8
Matacar	5.5	10.6	12.1
Matacar+Biolid	0.6	2	2
Matacar+GC-Mite	0.6	1.8	2

Discussion

GC-Mite+ Matacar performed very well in this trial, results showed higher degree of control compared of the other applications. GC-Mite + Matacar combined has 96.6 % control of the European Red Mite motile stages. Therefore, using either GC-Mite combined with Matacar or Matacar combined with Biolid E will give good results for more than 2 months of application.

