

C. **Apple (Royal Gala):**  
**Nave S. Rocco, Trento, Italy**  
**JH Biotech, Inc.**

**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
<b>Control</b>	26.4	36.4	45.8
<b>Matacar</b>	5.5	10.6	12.1
<b>Matacar+Biolid</b>	0.6	2	2
<b>Matacar+GC-Mite</b>	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.

