

Effectiveness of Clays and Copper Products in the Control of *Bactrocera Oleae* (Gmelin) and *Ceratitis Capitata* (Wiedemann) in Organic Farming

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Abstract

Tests on the effect of clays (kaolin and bentonite) and copper products (hydroxide and oxychloride) in the control of olive fruit fly, Bactrocera oleae (Gmelin), and Mediterranean fruit fly, Ceratitis capitata (Wiedemann), were carried out from 2003 to 2006 in olive groves, and in 2005 and 2006 in organic orange orchards (early ripening cv. Navelina).

Results demonstrate an efficacy of kaolin products in reducing attacks of Bactrocera oleae to olives and those of Ceratitis capitata to oranges. In olive groves, they gave similar or better results than copper hydroxide. Bentonite AG/W8 showed a significant reduction in punctures towards C. capitata. Bentonite products and BPLK kaolin are clearly washed off by the rainfall more easily than Surround WP.

Clays are very useful tools to control tephritid and other insects, and are also environmental friendly. Until now, however, they are not allowed as products for plant protection in European and Swiss organic farming.

Differently from the effect towards B. oleae, no tested copper product showed a significant reduction in C. capitata punctures on oranges.

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