

**24 years of mating disruption application on grape  
for *L. botrana* and *E. ambiguella* control**

# **MEZZACORONA GROUP EXPERIENCE**

**Feeding Europe with fewer pesticides  
European Parliament – Brussels - 4 November 2014**



**Mauro Varner  
Luisa Mattedi**

**Mezzacorona S.C.A.  
Fondazione E. Mach**



# MEZZACORONA GROUP

## A little history

The winery of Mezzocorona was founded on 1904



# MEZZACORONA GROUP IN ITALY



**3000 ha in Trentino**  
2.500 ha grape – 500 ha apple

**300 ha in South Tyrol**

**1000 ha in Sicily**  
700 ha grape

# GRAPE SURFACE

**MEZZACORONA: 2.800 ha – 1.600 associated farmers**  
**Average surface/farm = 1,7 ha**

|                 |               |
|-----------------|---------------|
| less than 2 ha  | <b>77,8 %</b> |
| from 2 to 5 ha  | <b>17 %</b>   |
| from 5 to 10 ha | <b>4,2 %</b>  |
| more than 10 ha | <b>1 %</b>    |

**FROM 1991 TO 2014  
MATING DISRUPTION ON GRAPE**

# MATING DISRUPTION ON GRAPE IN TRENTINO



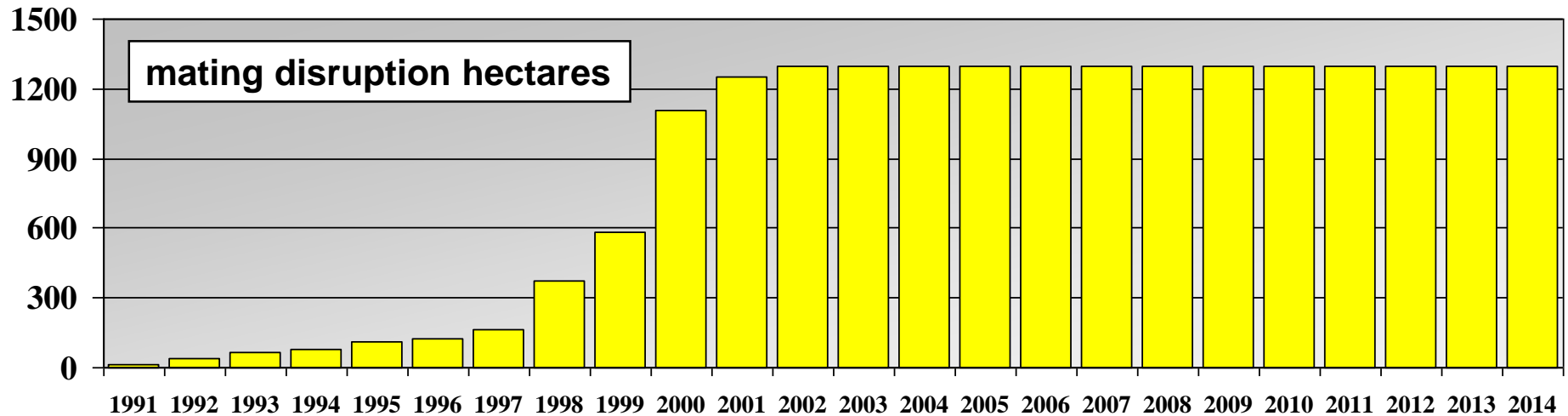
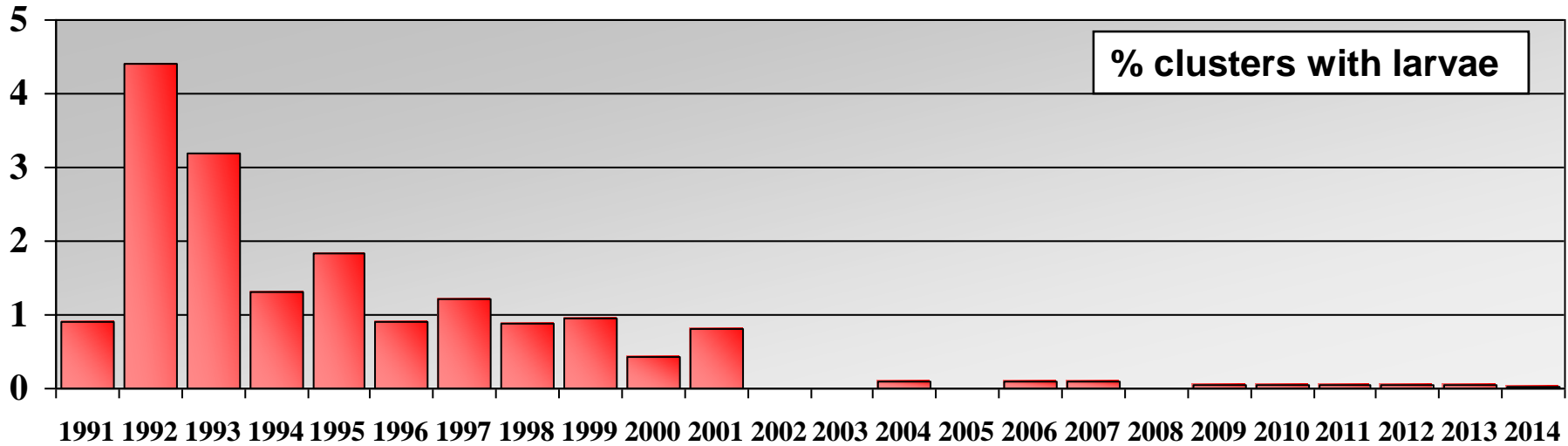
- in Trentino there are 10.000 hectares of grape
- from 2003, MD is applied on ALL the hectares (9.700 hectares)
- ... now a little bit of history of mating disruption application in Mezzacorona vineyards...

# MATING DISRUPTION on GRAPE – YEAR 1991

MEZZACORONA SCA - ESAT - ISTITUTO AGRARIO S. MICHELE A/A

- 1991 from field trials to practical application
  - small surface (13,7 ha)
- 55 growers were involved, Mezzacorona Winery, ESAT technician of the area and Istituto Agrario di S. Michele all'Adige
- without cooperatives involvement, the small size of the farms would had been an obstacle for the practical application of mating disruption

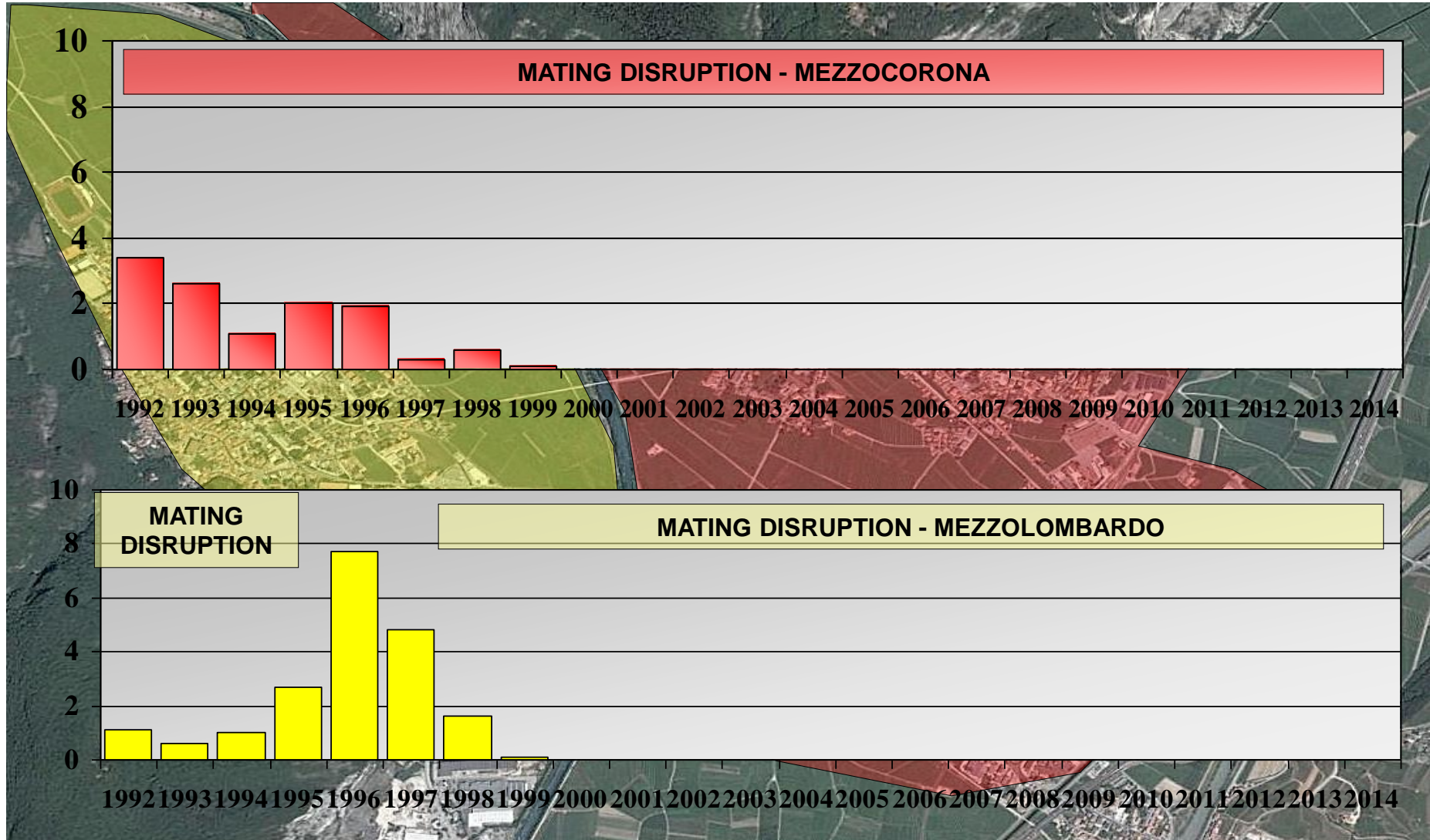
# MATING DISRUPTION – WIDE AREA EFFECT MEZZOCORONA AREA





# MATING DISRUPTION & PEST POPULATION

## clusters with larvae (%) – First generation damage assessment



**FROM 2001 *Eupoecilia ambiguella* APPEARANCE**

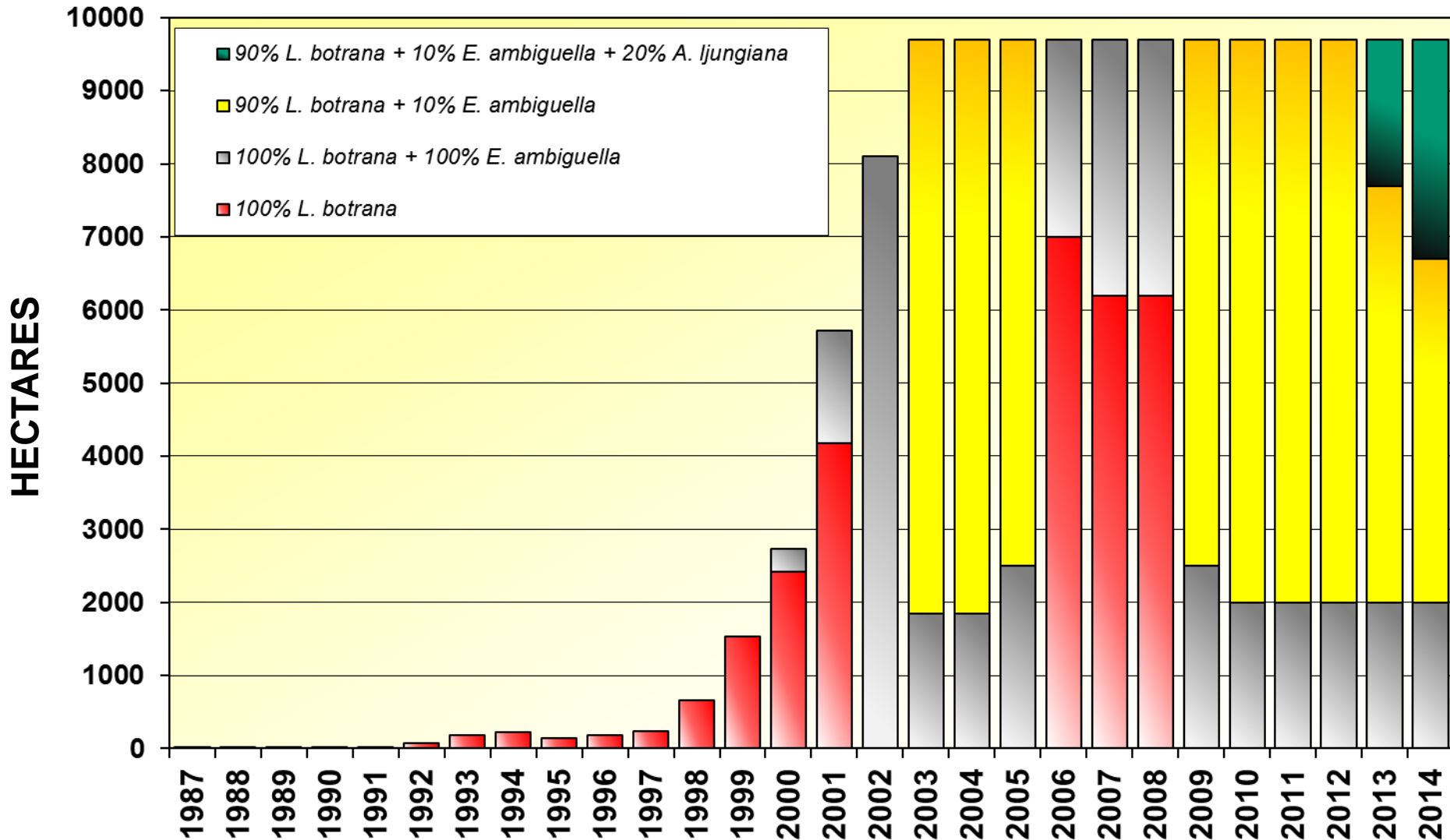


# MATING DISRUPTION on GRAPE - YEARS 1991- 2014

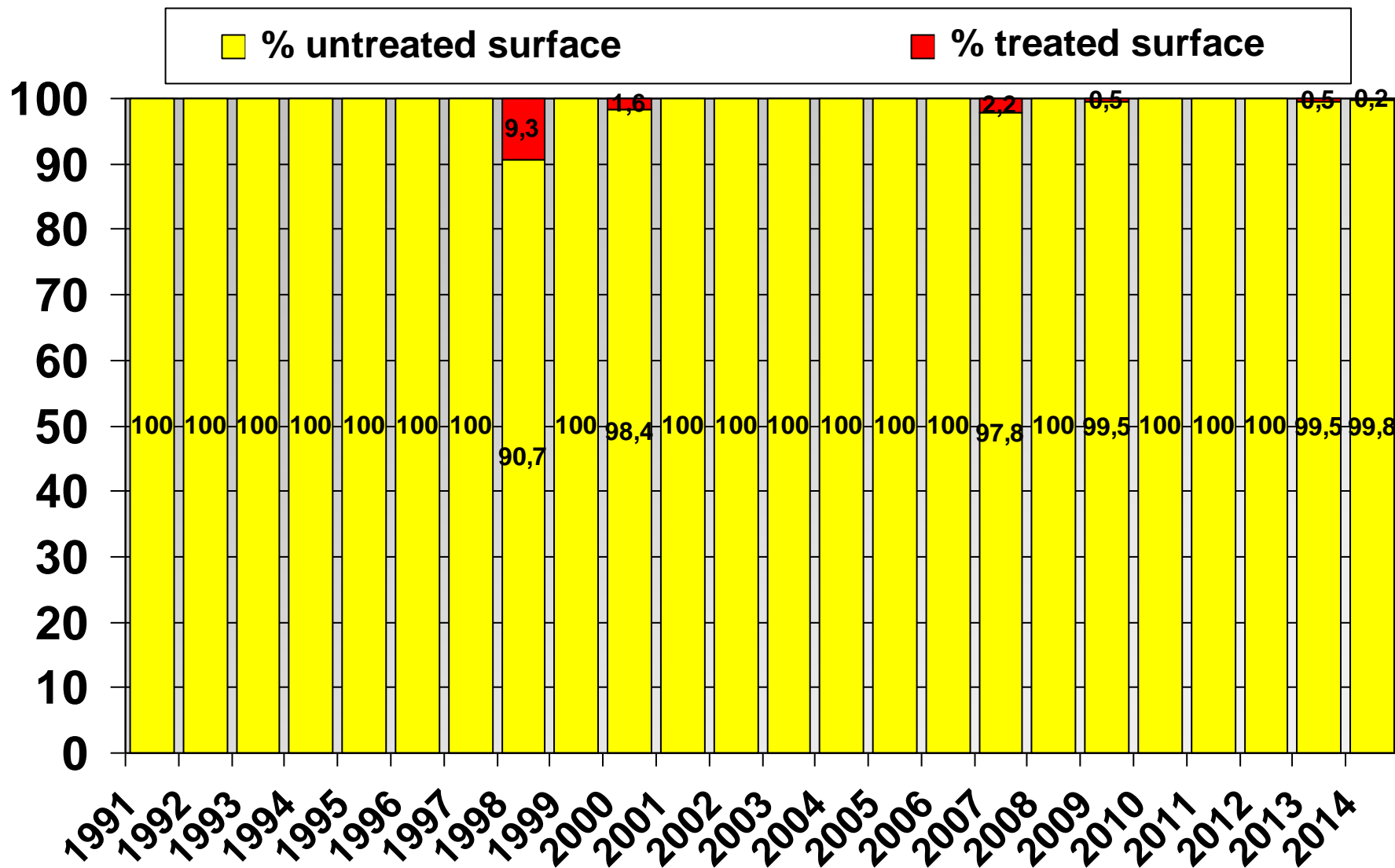
## DISPENSER TYPES – ROTALIANA PLAIN



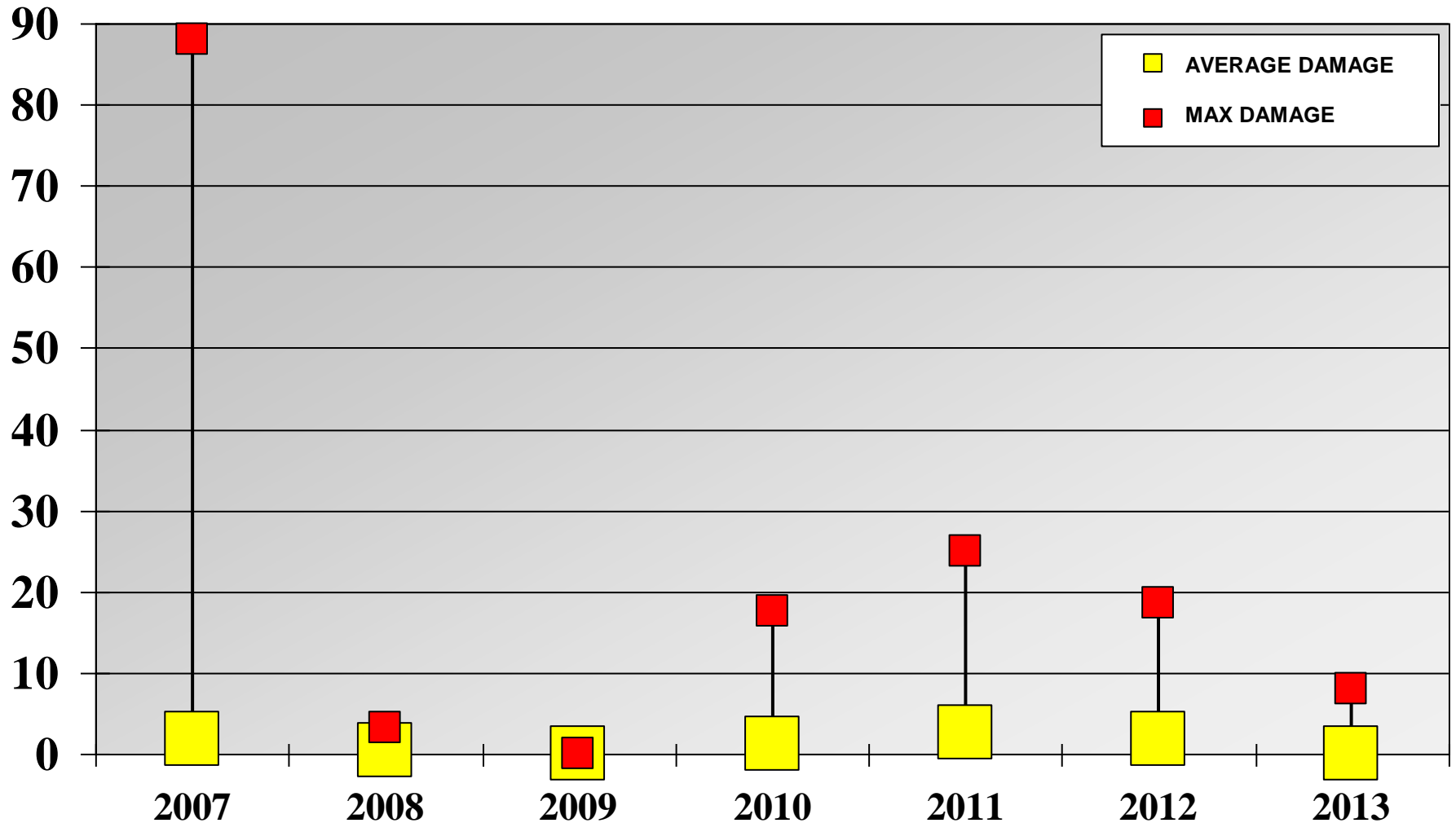
# FROM 2002 PRODUCTS APPLICATION IN RELATION TO INSECTS PRESENCE



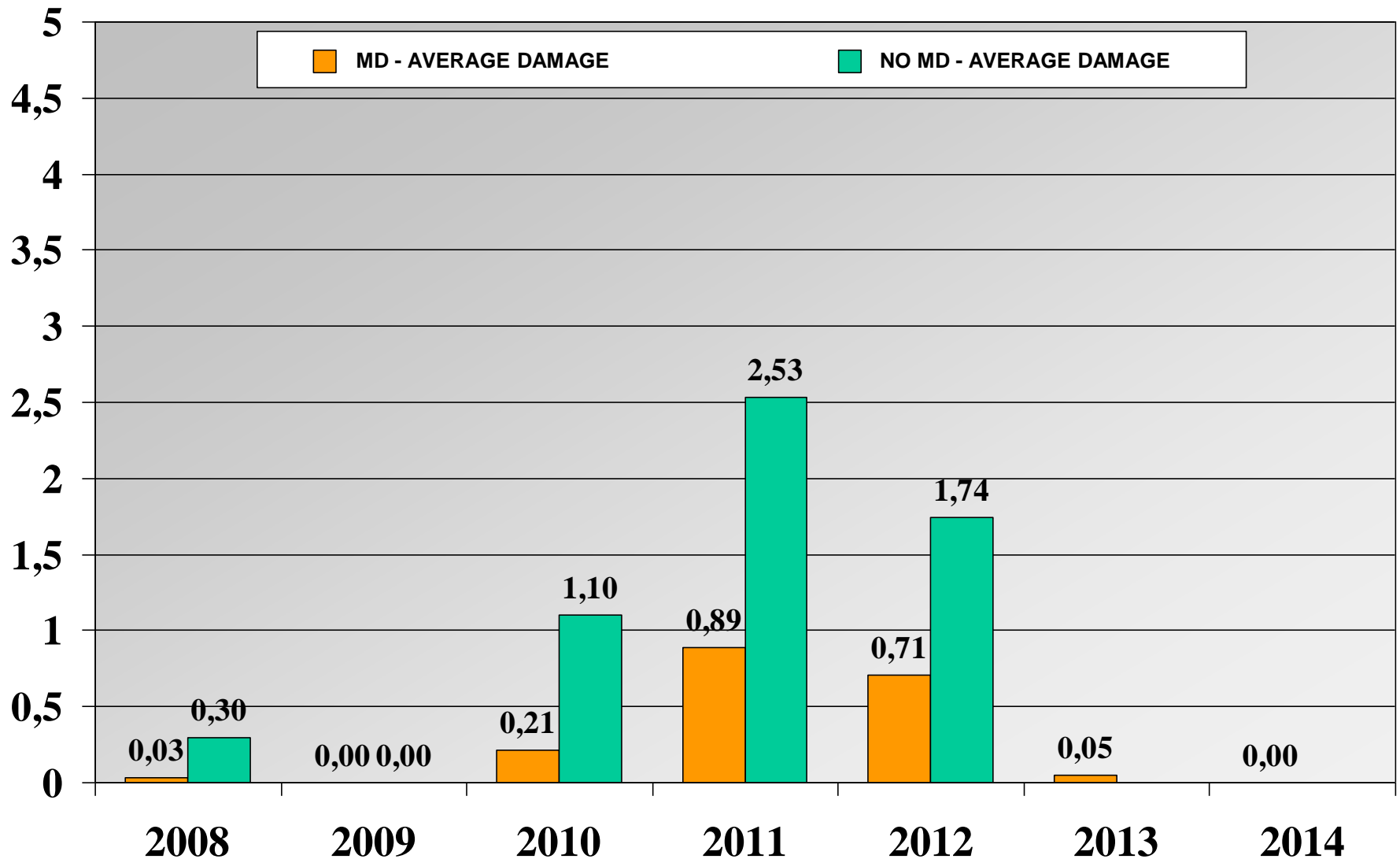
# % MATING DISRUPTION SURFACE WITH or WITHOUT INSECTICIDE SPRAY- MEZZOCORONA



# A. Ijungiana AVERAGE DAMAGE ON CLUSTER MEZZOCORONA AREA



# MATING DISRUPTION ON *A. Ijungiana*



# FROM 2013 - TRIPLE PURPOSE PRODUCT

*Lobesia + Eupoecilia + Argyrotaenia*

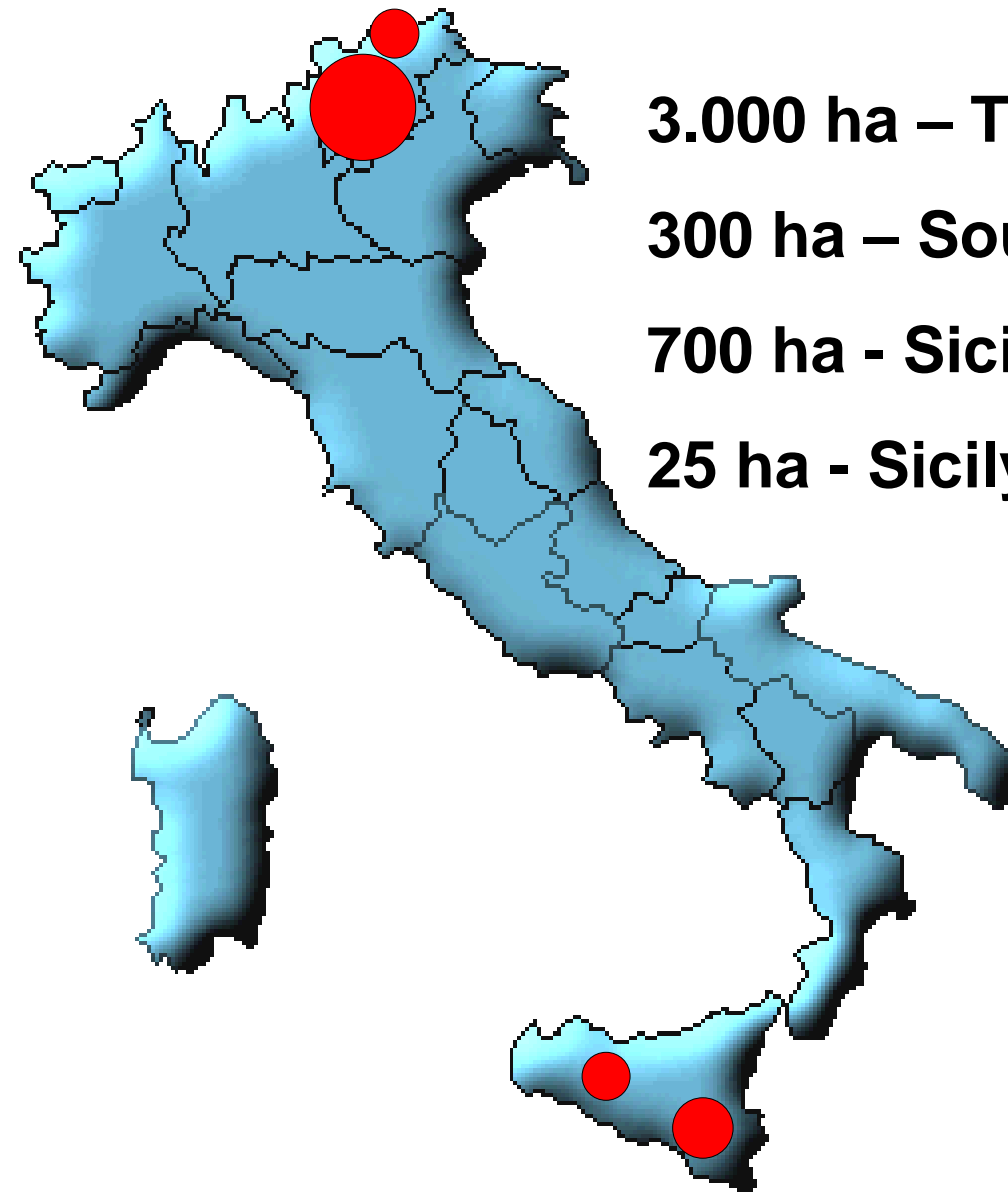




**“POSITIVE EFFECTS”  
OF MATING DISRUPTION**

# MATING DISRUPTION – YEAR 2014

## MEZZACORONA GROUP



**3.000 ha – Trentino (grape & apple)**

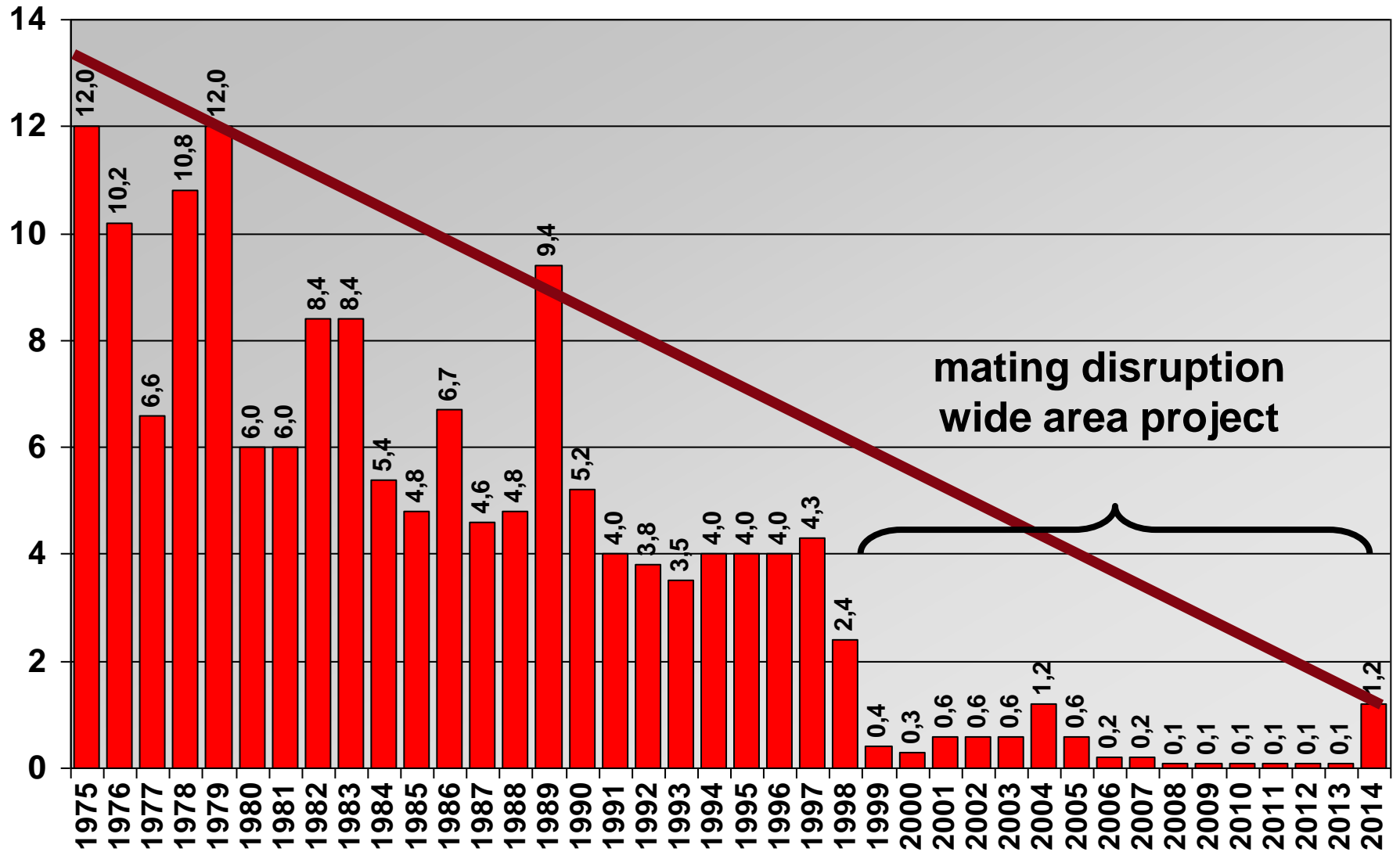
**300 ha – South Tyrol**

**700 ha - Sicily**

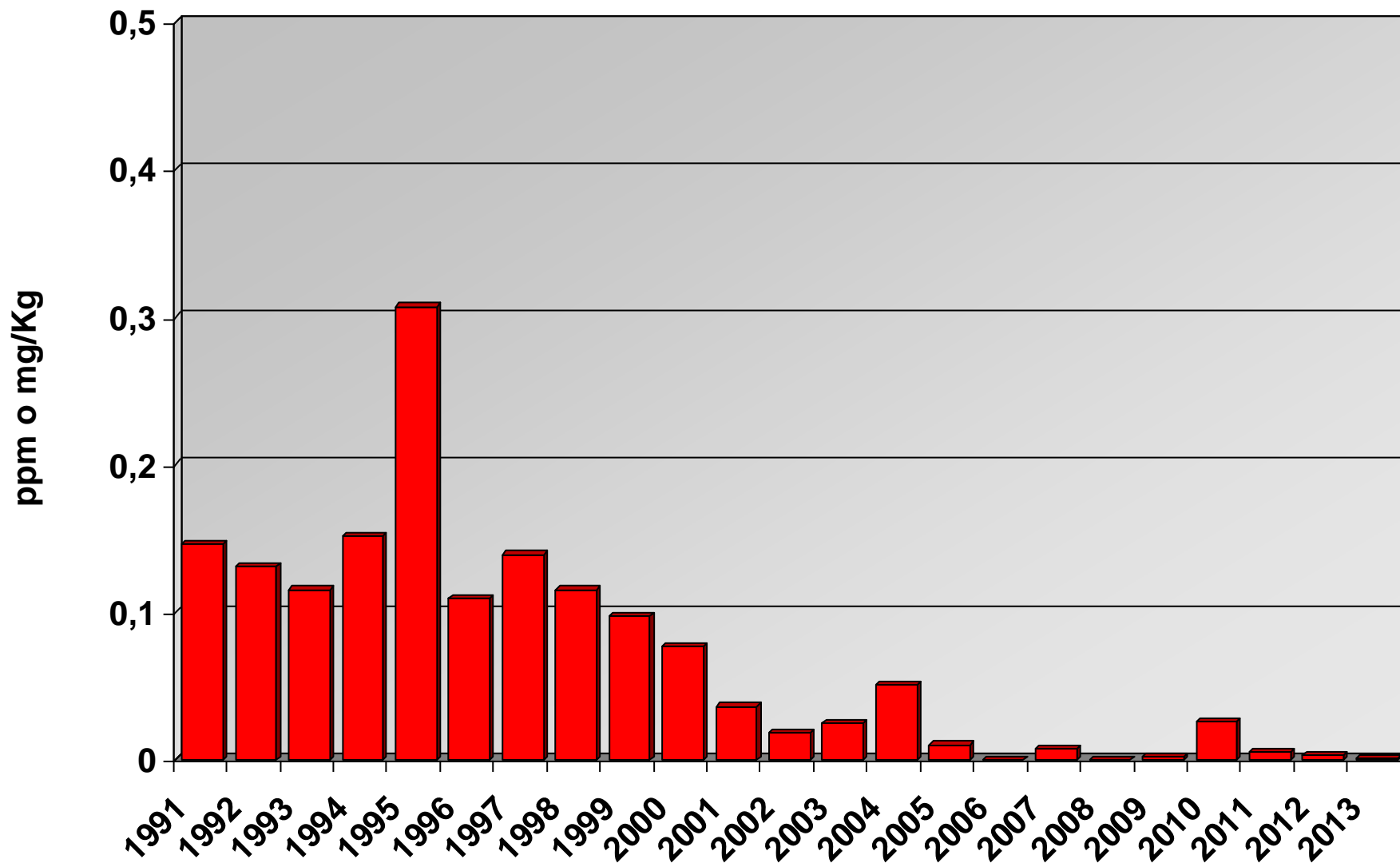
**25 ha - Sicily for *Planococcus ficus* (trial)**

# INSECTICIDE USE (kg/ha/year)

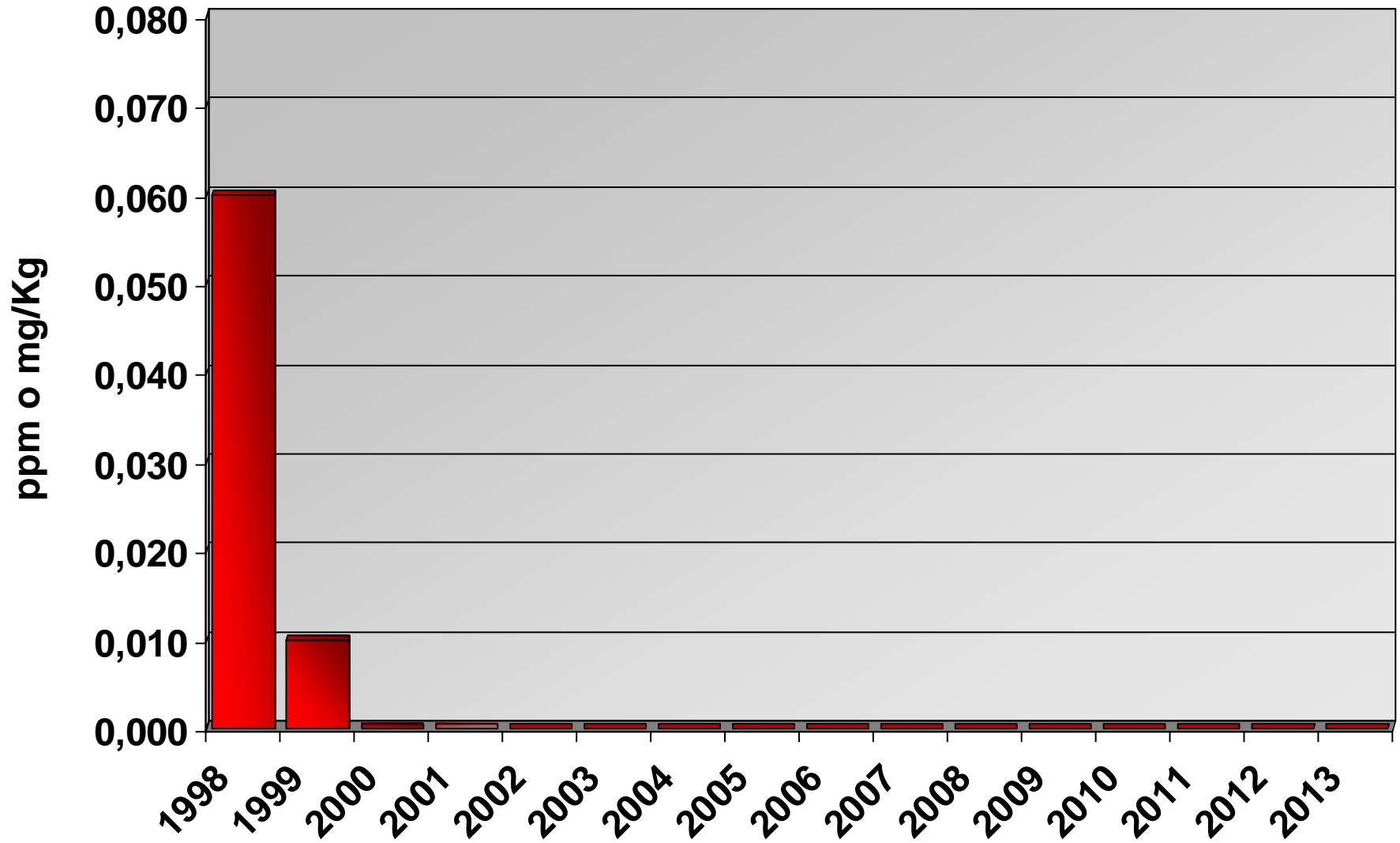
## MEZZACORONA VINEYARDS



# INSECTICIDES RESIDUES HARVESTED GRAPES - MEZZACORONA



# INSECTICIDES RESIDUES WINES - MEZZACORONA



**“NEW POSSIBLE PROBLEMS” THAT MAY  
LEAD TO AN INCREASE OF INSECTICIDES  
APPLICATION**

# VECTOR OF Flavescence dorée (*Scaphoideus titanus*)



# VECTOR OF BOIS NOIR (*Hyalesthes obsoletus*)



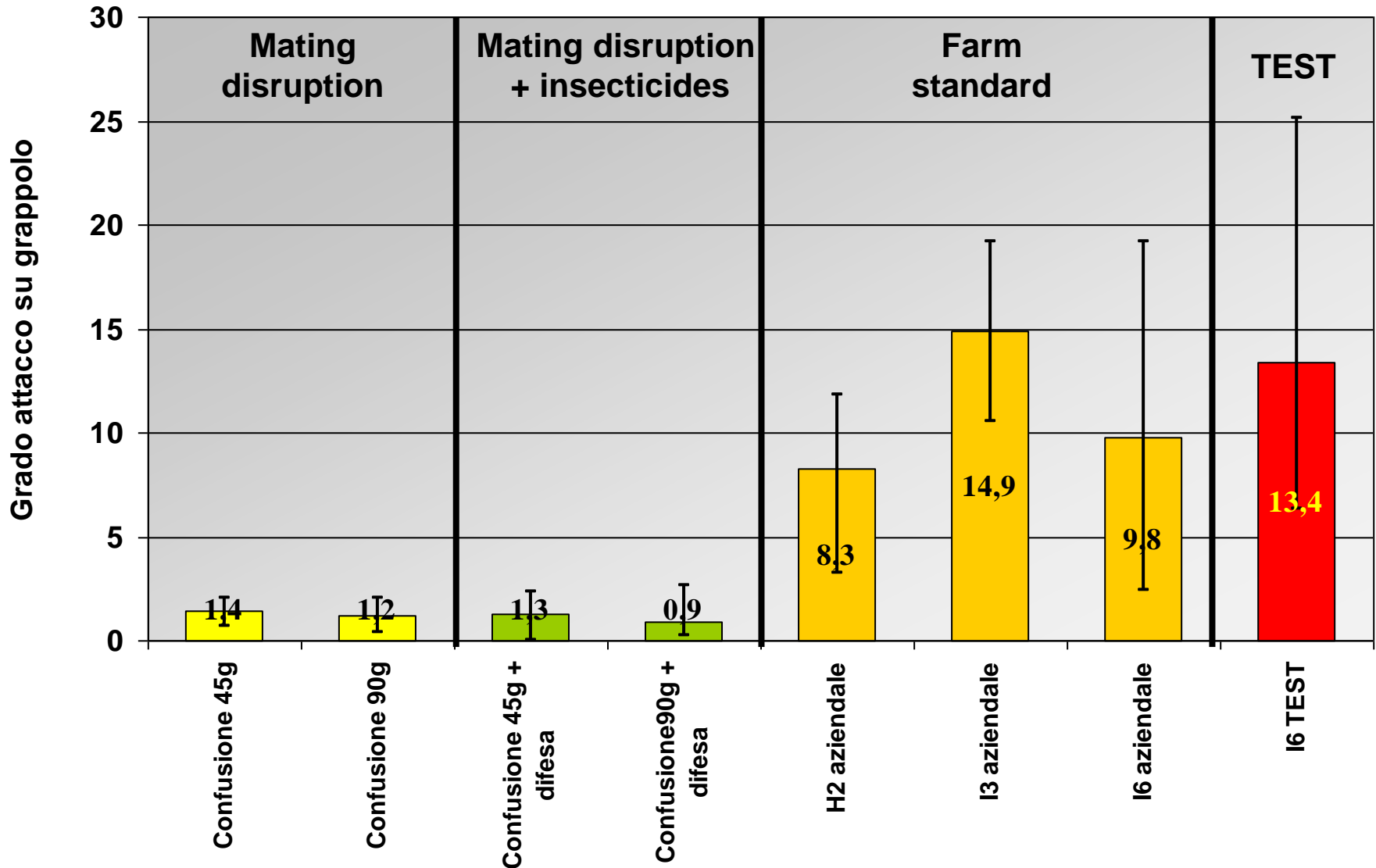


# VINE MEALY BUG (*Planococcus ficus*)



# VINE MEALY BUG (*Planococcus ficus*)

## HARVEST DAMAGE ASSESSMENT – 28/8/2014



## SPECIAL THANKS TO:

- ALL the people that helped, in various forms, for 24 years the application of mating disruption
- TO Marino Gobber, Roberto Lucin, Massimo Frioli, Ronny Dalponte, Alberto Gelmetti, Marco Beozzo, Michele Bonetti, Martino Andreoli, Martino Adami, Flavia Forno for their great help
- TO all the growers that allowed the use of their farms and followed up properly all our indications
- Mezzacorona Group managers for their continuous support on environmental friendly activities
- TO Rizzoli Fabio (Mezzacorona Group CEO) for his precious stimulus on both day-to-day work and long term views



... thank you for your the attention...

