



New parasitoids of *Tuta absoluta*



marco mosti

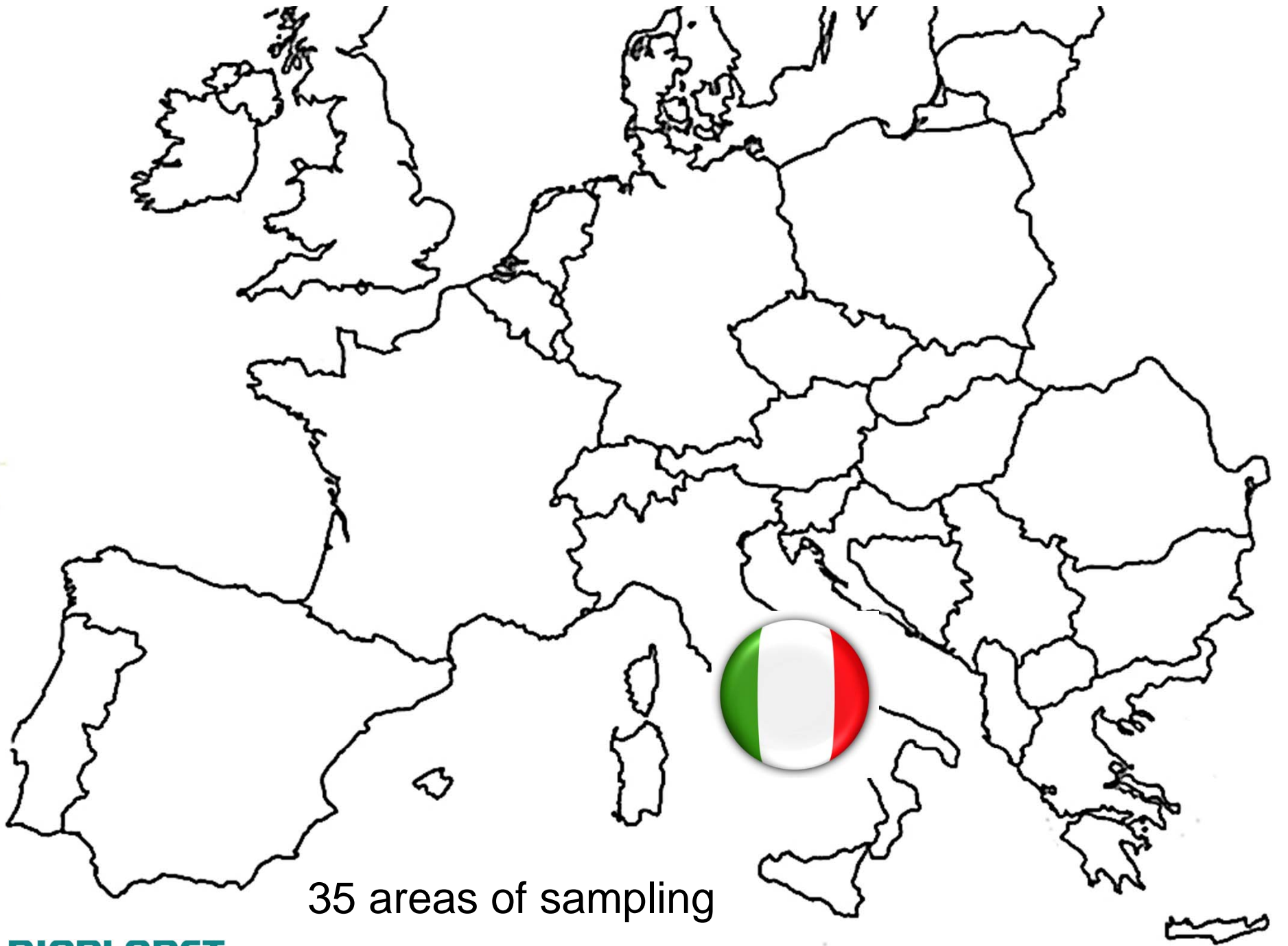
ABIM Luzern 2010



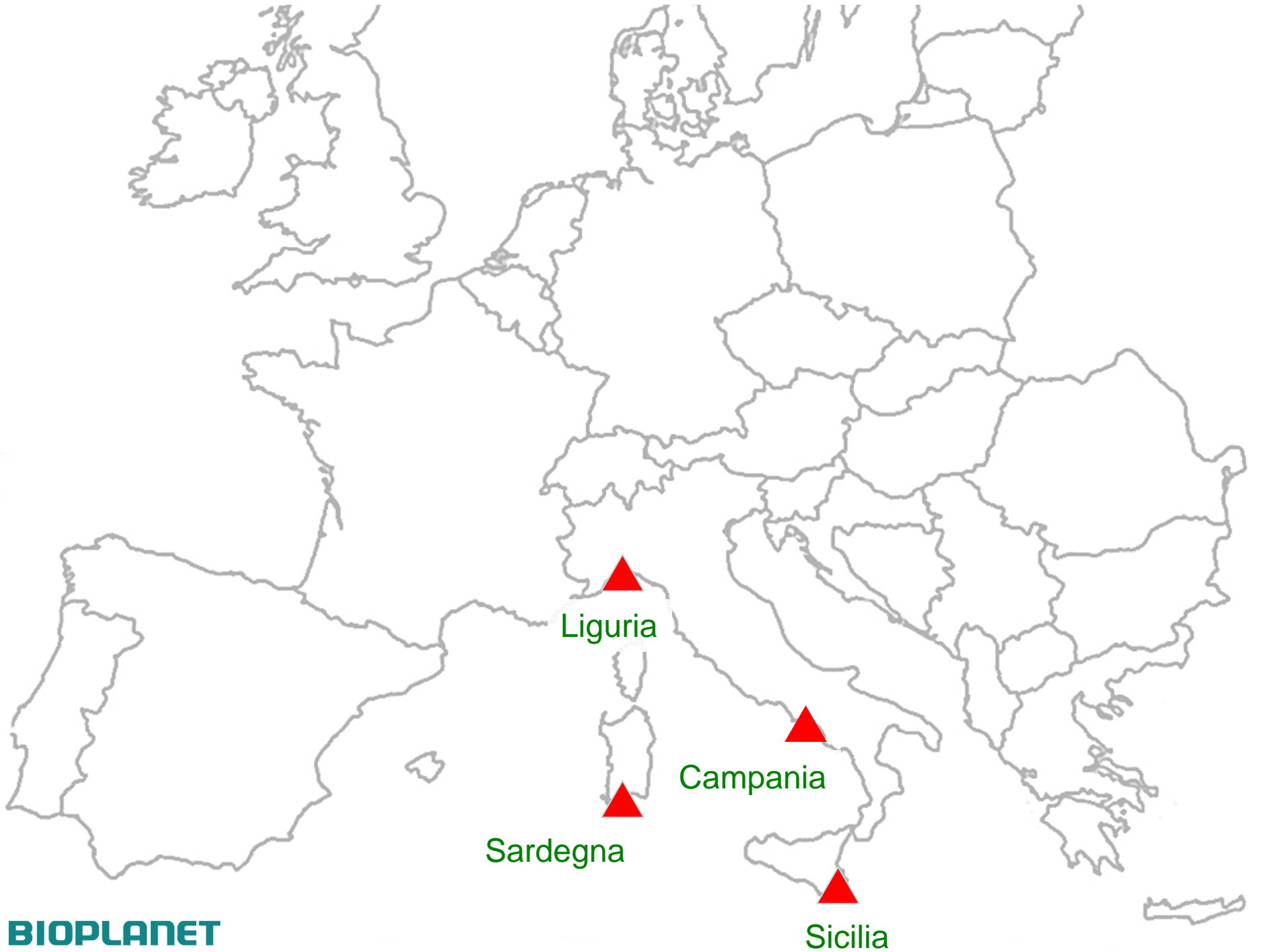
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- located in cesena (north italy)
- production of macrobials since 1986
- 12 species produced today
- products distributed in 20 countries

- **find indigenous parasitoids able to switch from usual host to *Tuta absoluta* and evaluate their potential as new biocontrol agents.**



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XX specimen found

Diadegma ledicola



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Necremnus



Necremnus tidius



Necremnus artynes



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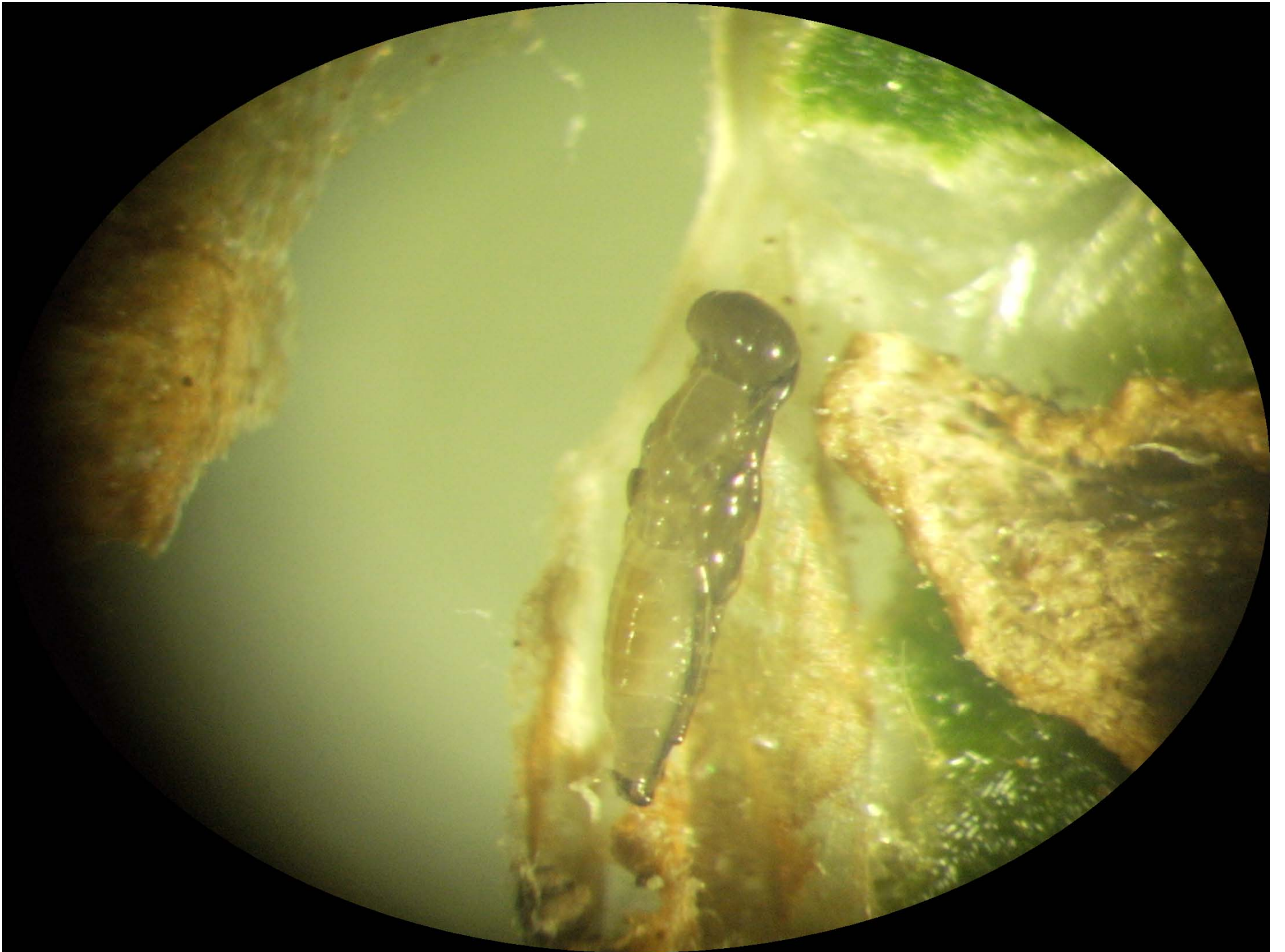
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Test

D1- Oviposition of 5 *Tuta absoluta* per plant for 7 days.

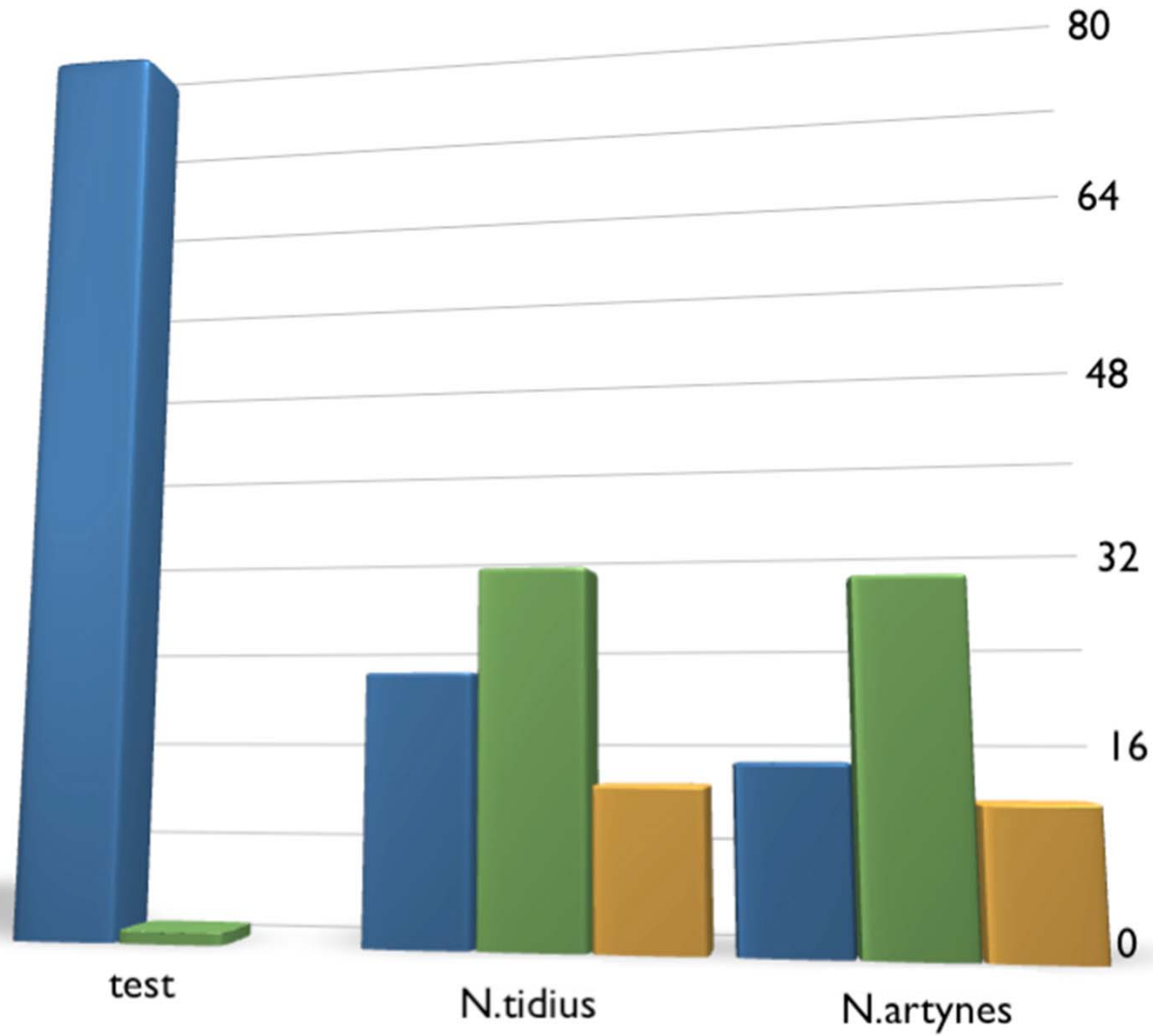
D14- Introduced 5 parasitoids per plant

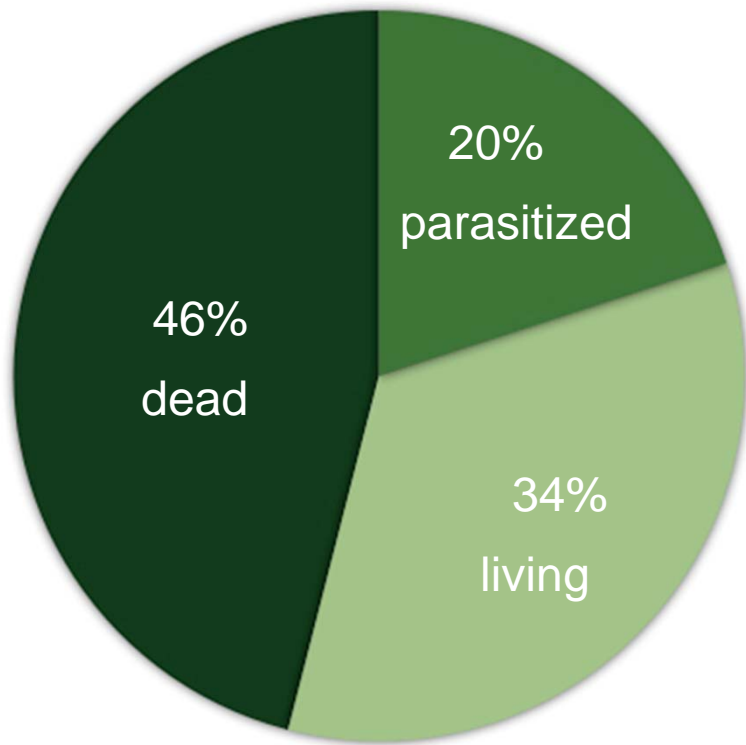
D24- Leaves collected

Thesis:

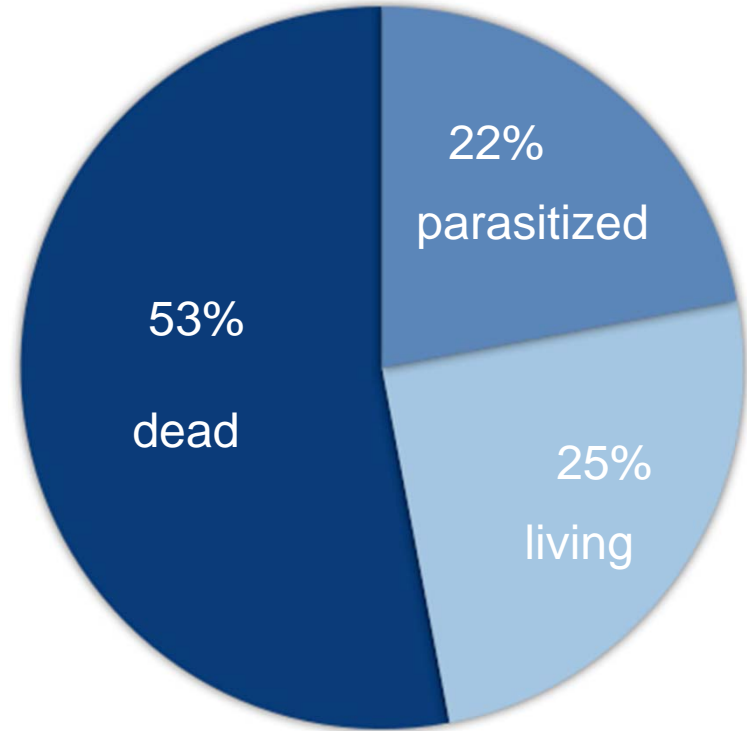
- 1. Test**
- 2. *Necremnus tidius***
- 3. *Necremnus artynes***

■ Living ■ Dead ■ Parasitized





N.tidius



N.artynes

- Etology studies continue with Torino University;
- ***Diadegma ledicola***: interesting and pending for a more appropriate technique of mass rearing;
- ***N.tidius*** and ***N.artynes***: both very interesting and quickly available for biocontrol programs;
- ***Necremnus artynes***: frequently found in mediterranean area, best candidate for first commercial application;
- Scale up phase;
- Commercially available beginning 2011.