

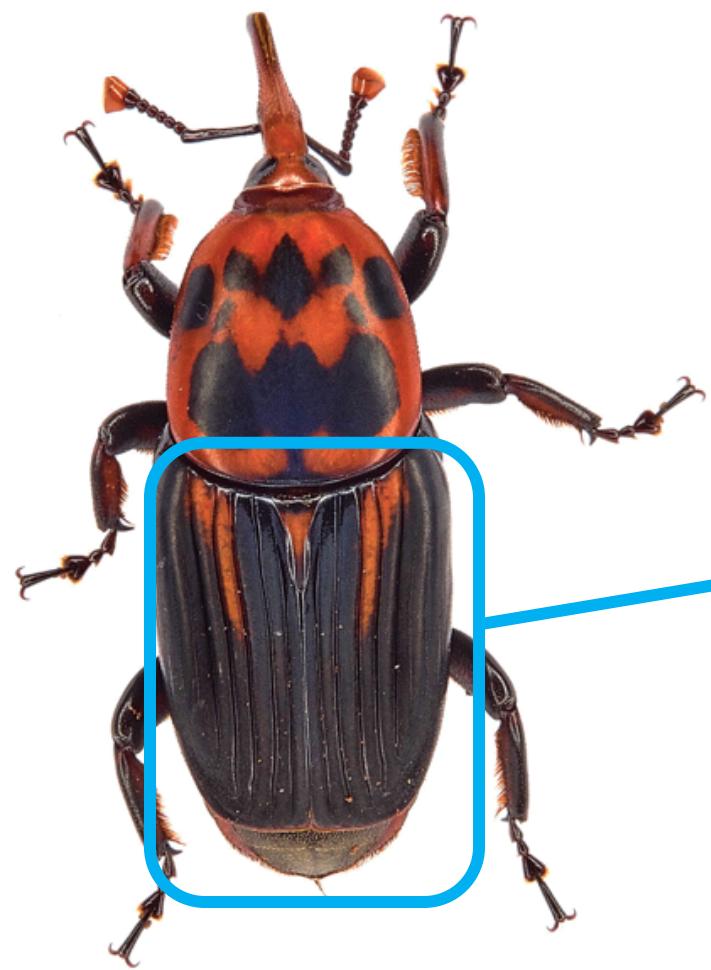
# The RPW as vector of Bacteria, Fungi and Acari

**Porcelli F.**<sup>1,4,5</sup>, Scrascia M.<sup>2</sup>, Pazzani C.<sup>2</sup>, Pollastro S.<sup>1</sup>, Di Palma A.<sup>3</sup>, Russo V.<sup>4</sup>, Roberto R.<sup>1</sup>,  
Salerno M.<sup>1</sup>, Valentini F.<sup>4</sup>, Djelouah K.<sup>4</sup>

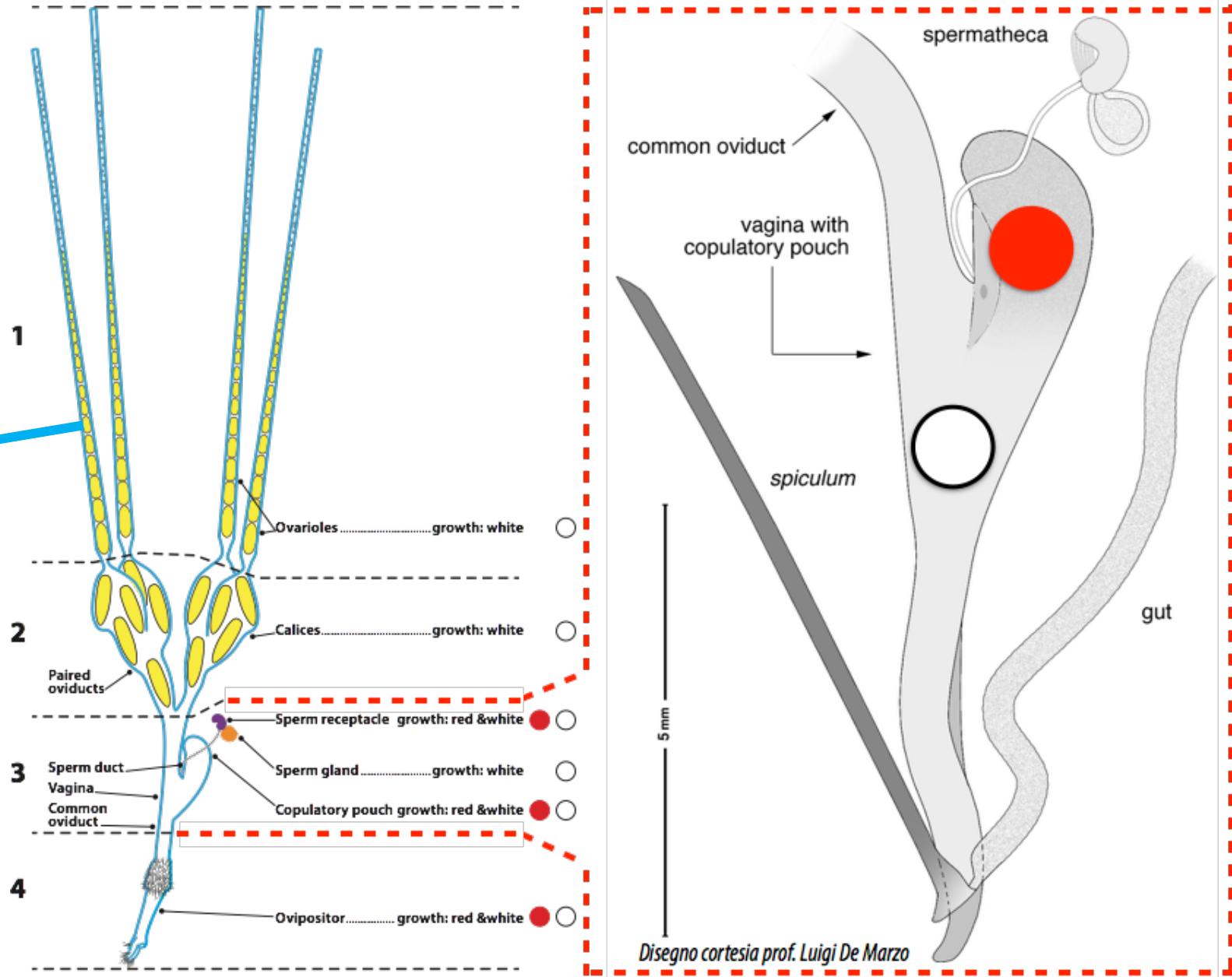
1 DiSSPA UNIBA Aldo Moro, 2 Dipartimento di Biologia UNIBA Aldo Moro; 3 Dipartimento di Scienze Agrarie, degli Alimenti e dell'Ambiente UNIFG, 4  
CIHEAM-IAMB, 5 CNR-IPSP Bari



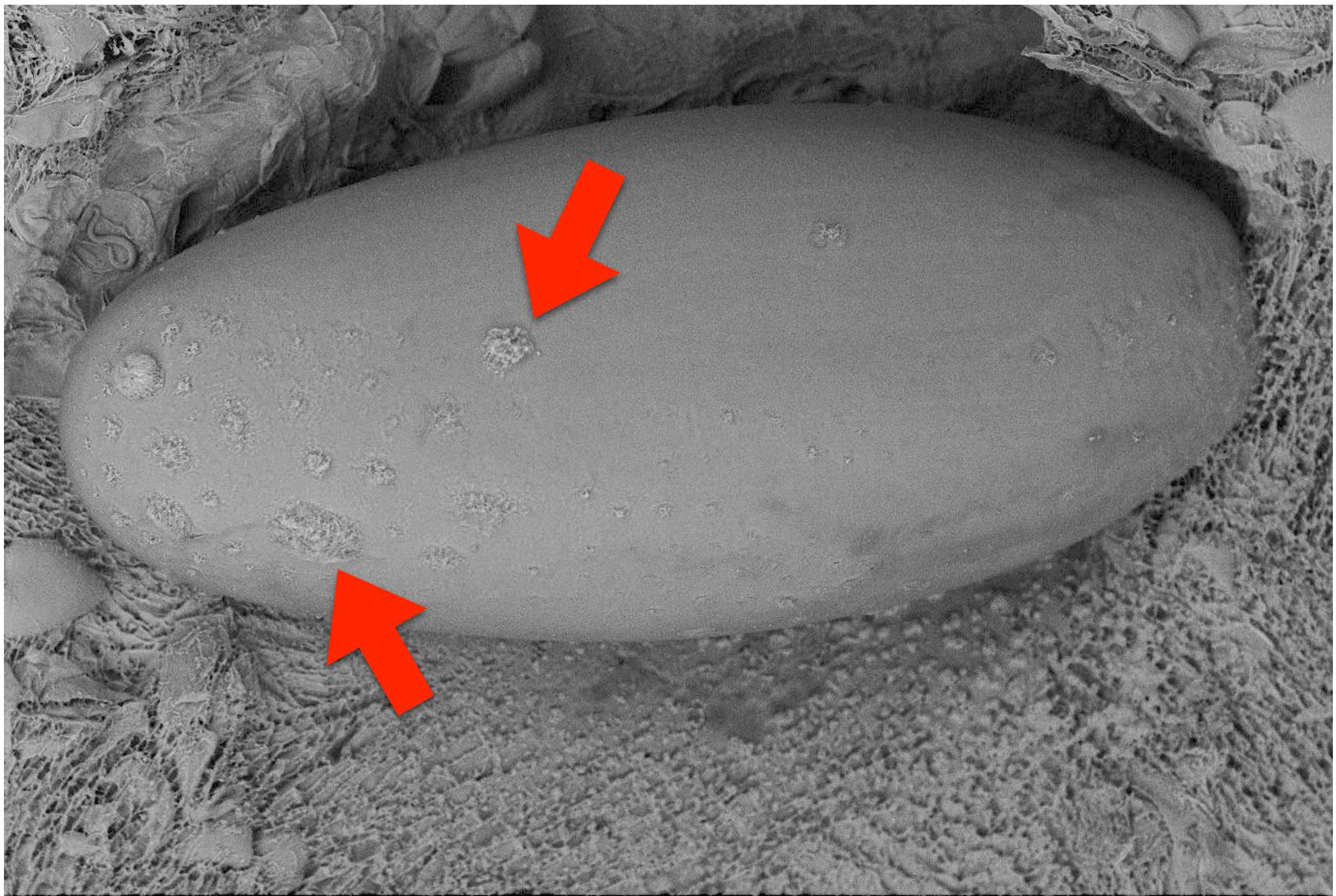
Food and Agriculture  
Organization of the  
United Nations



Co-introduction of new bacterial species or strains in invaded territories (yes, I know: it is a male!)



Red arrows  
point on  
microorganisms  
suspension that  
contaminate the  
egg.



Porcelli0007

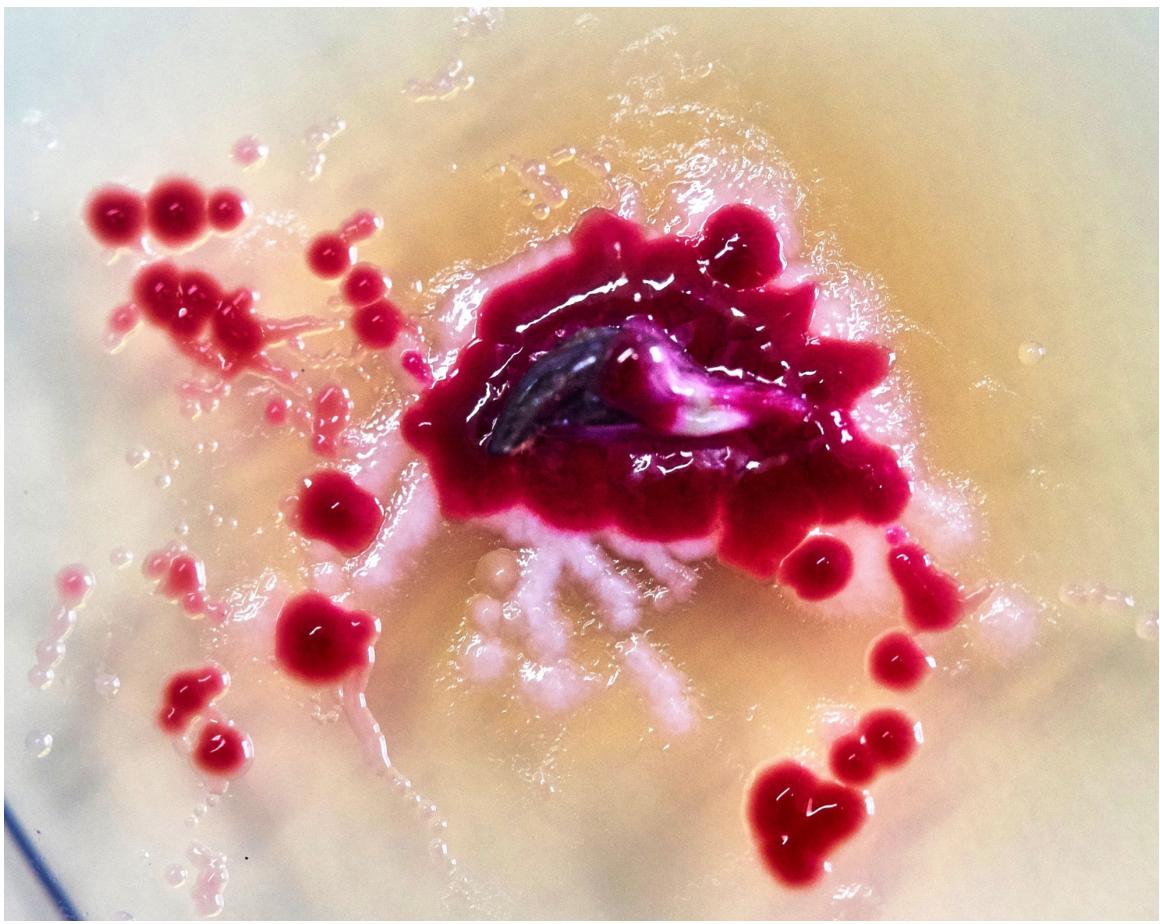
2014/09/10

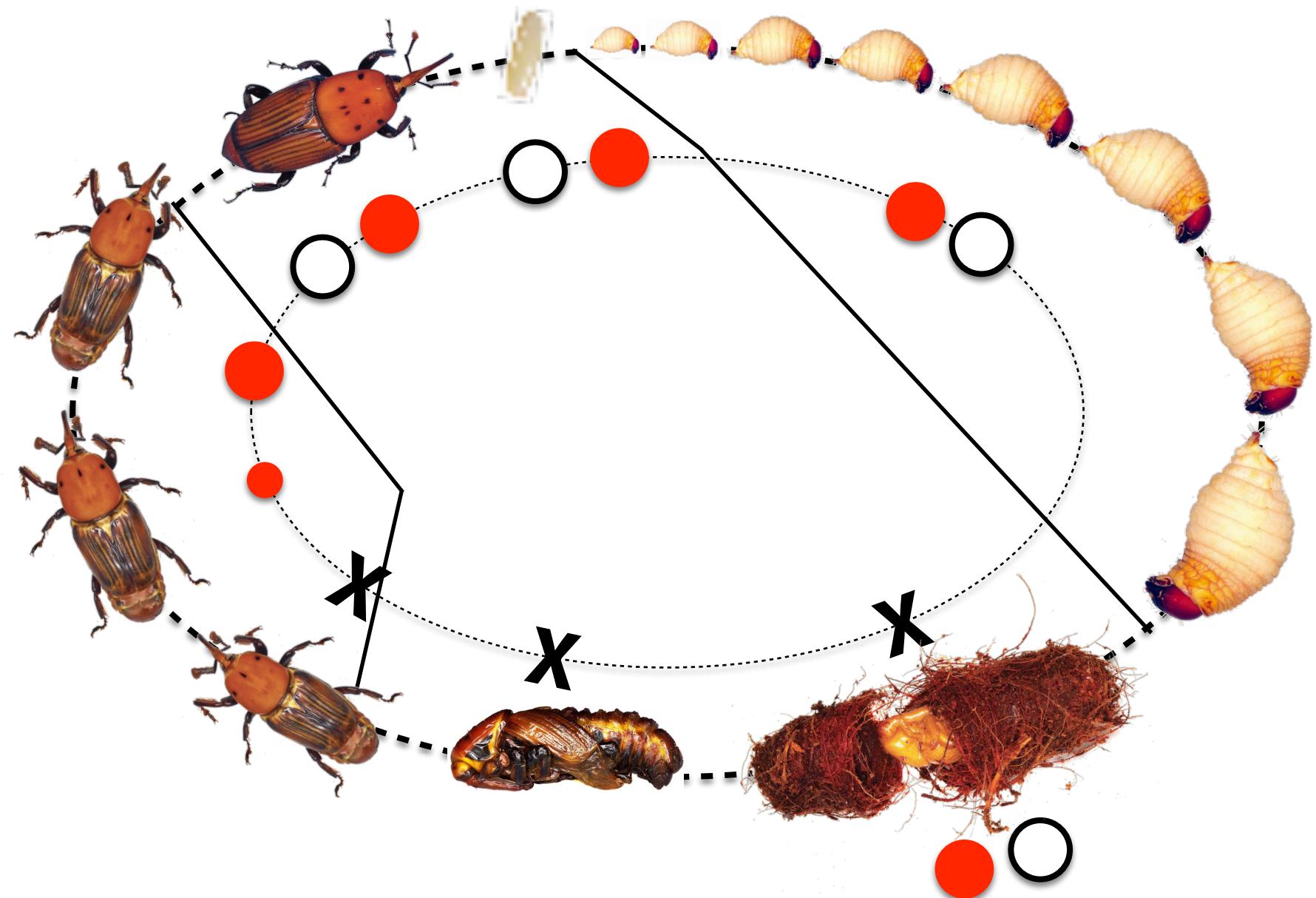
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D7.4

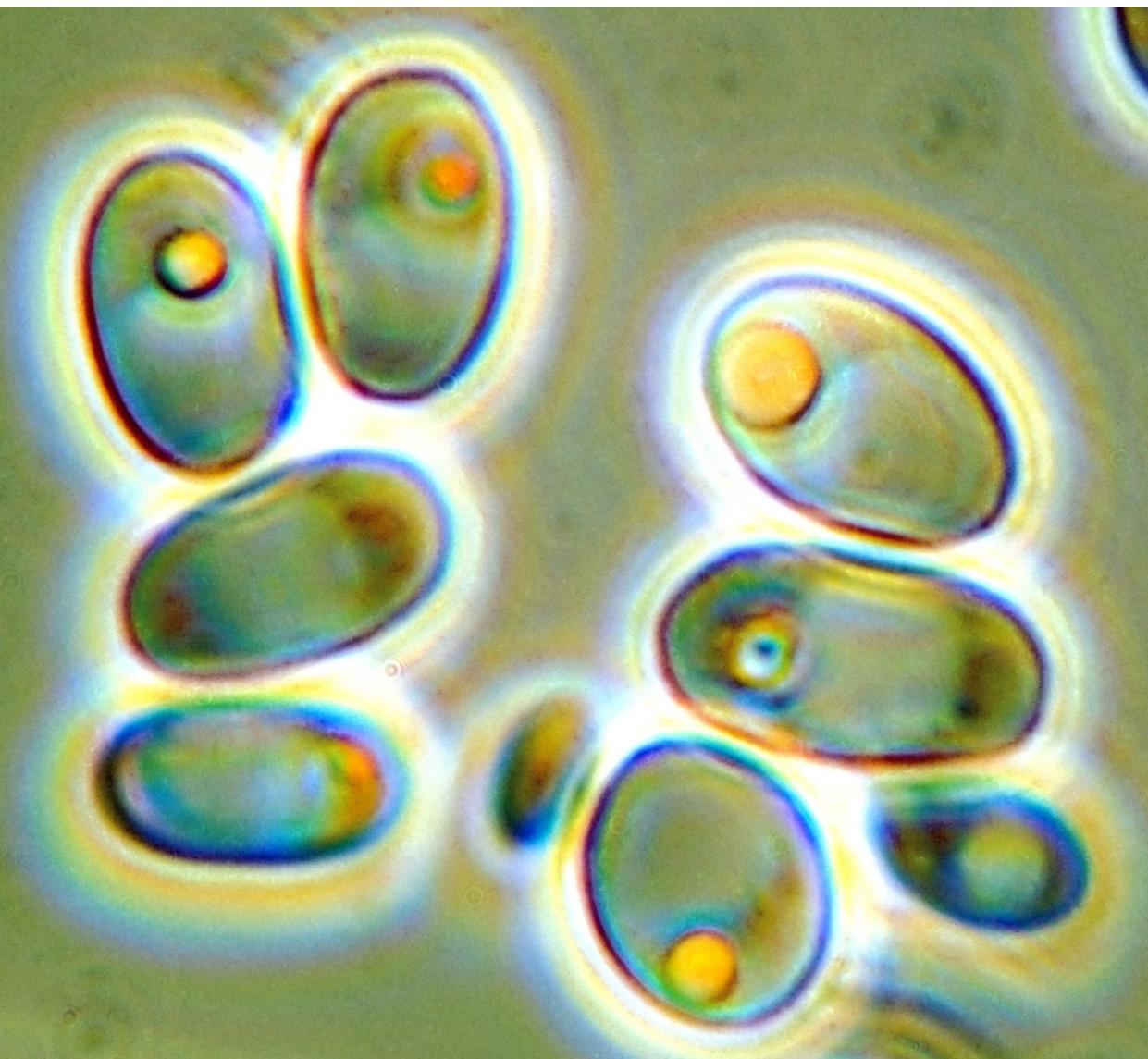
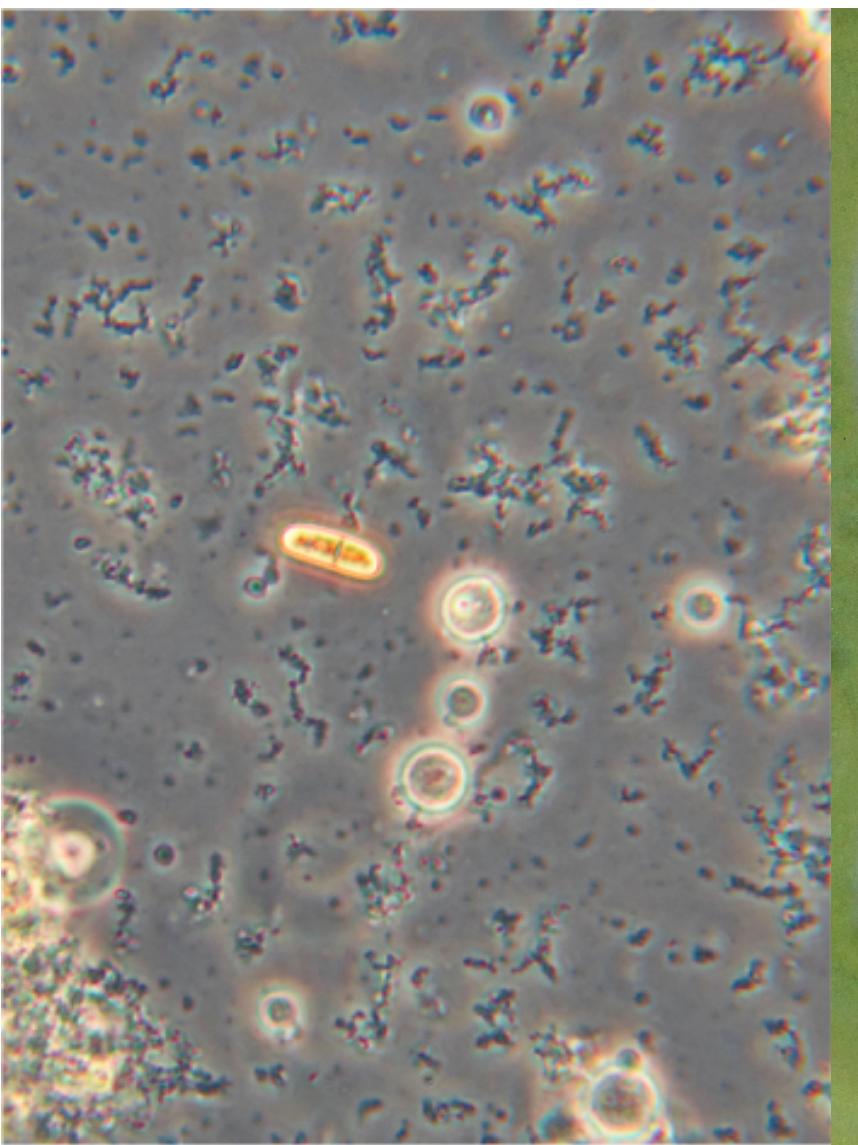
x100

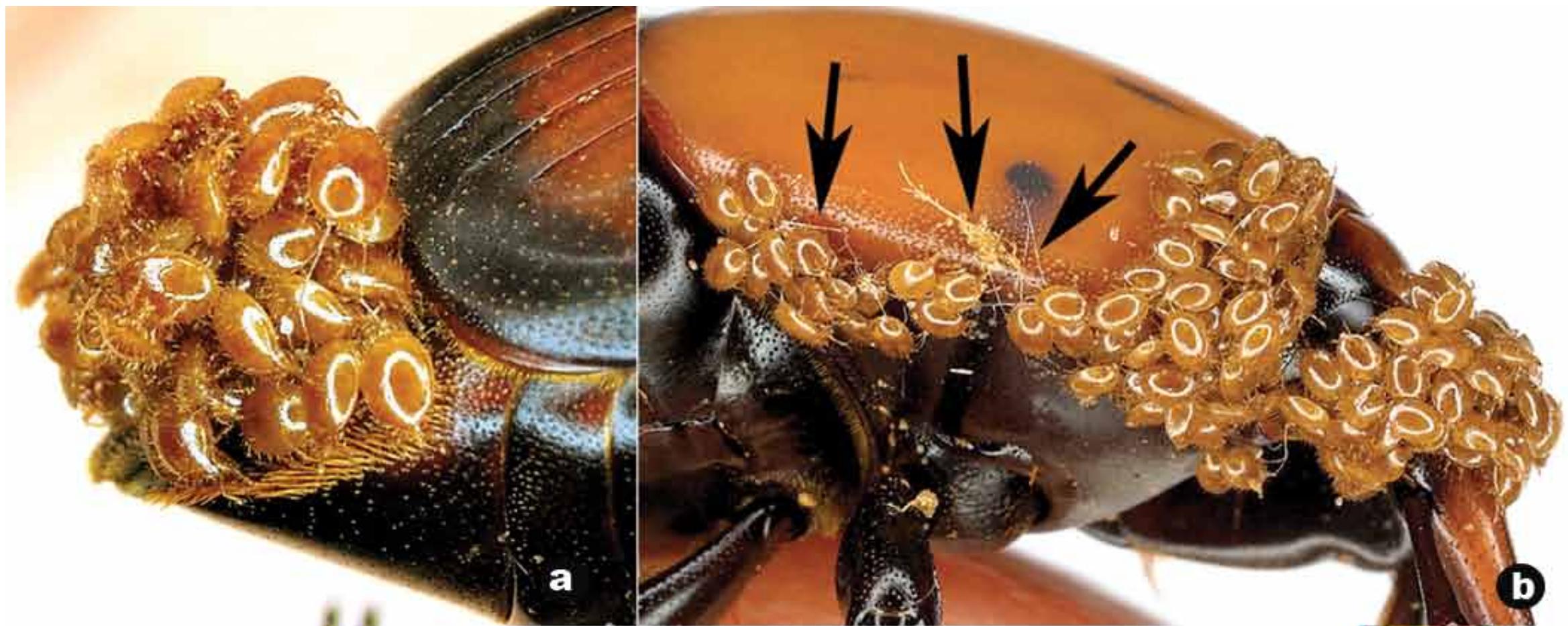
1 mm





Vertical  
Serratia  
transmission in  
RPW female  
lifecycle





BULLETIN OF THE ENTOMOLOGICAL SOCIETY OF MALTA (2009) Vol. 2: 61-66

## *Urobovella marginata*

Occurrence of *Centrouropoda almerodai* and  
*Urobovella marginata* (Acari: Uropodina)  
phoretic on the Red Palm Weevil in Malta

Francesco PORCELLI<sup>1\*</sup>, Ernesto RAGUSA<sup>2</sup>, Anna Maria D'ONGHIA<sup>3</sup>,  
Steve MIZZI<sup>4</sup> & David MIFSUD<sup>5</sup>



*Centrouropoda almerodai* in Europe...

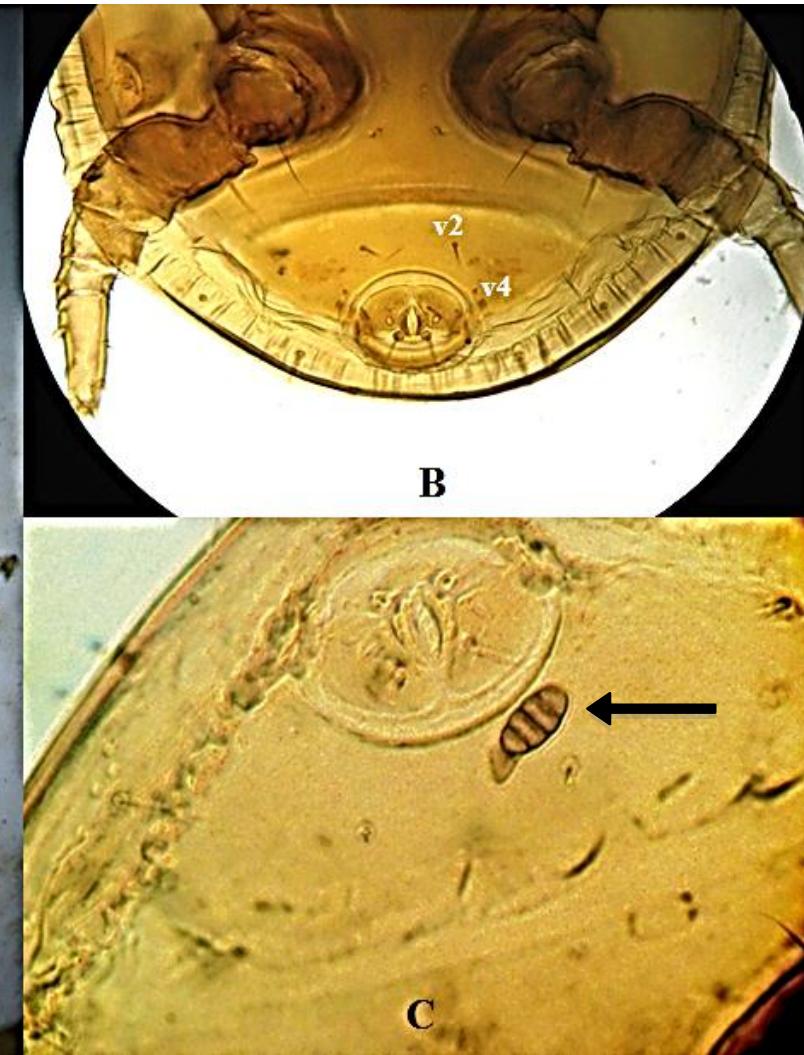


BULLETIN OF THE ENTOMOLOGICAL SOCIETY OF MALTA (2009) Vol. 2 : 61-66

### Occurrence of *Centrouropoda almerodai* and *Urobovella marginata* (Acar: Uropodina) phoretic on the Red Palm Weevil in Malta

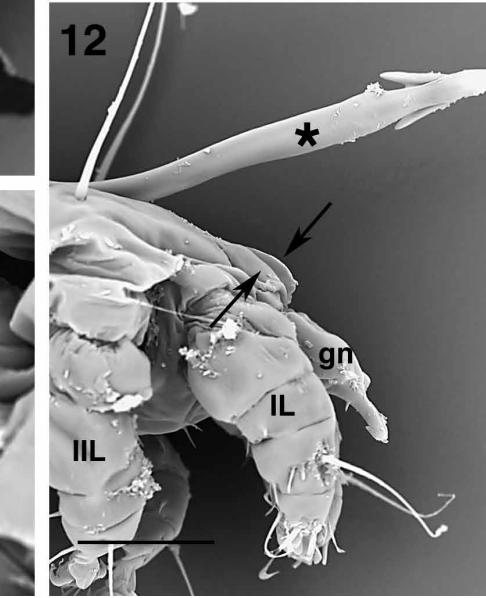
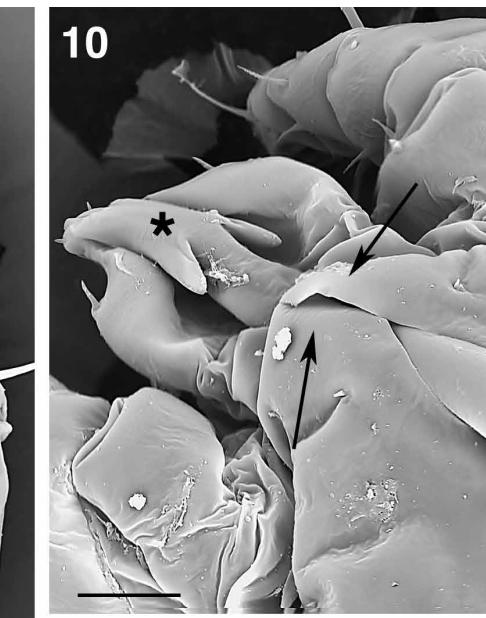
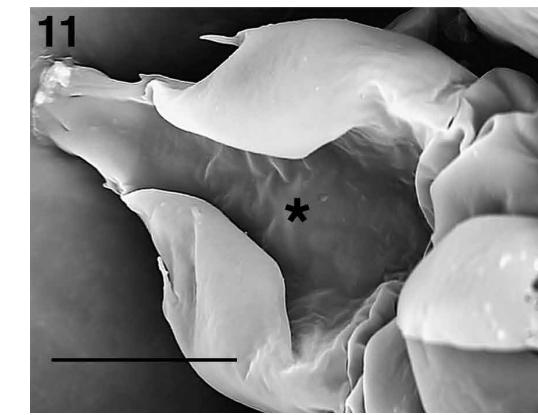
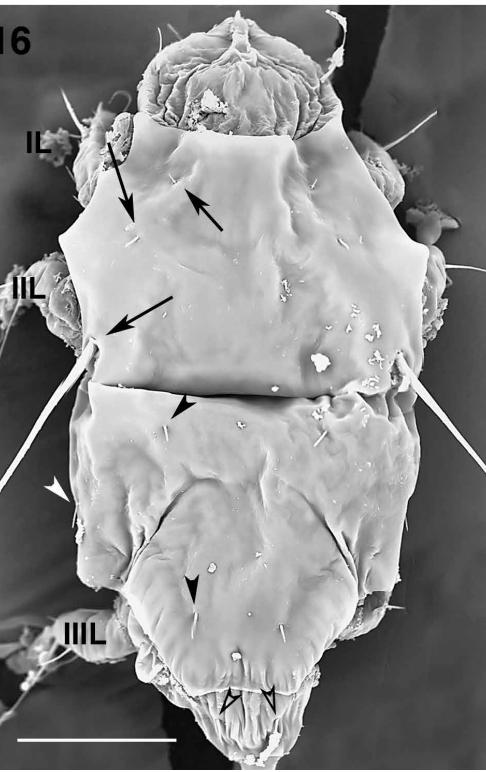
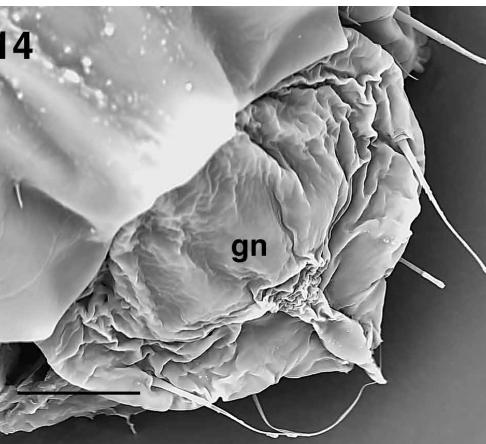
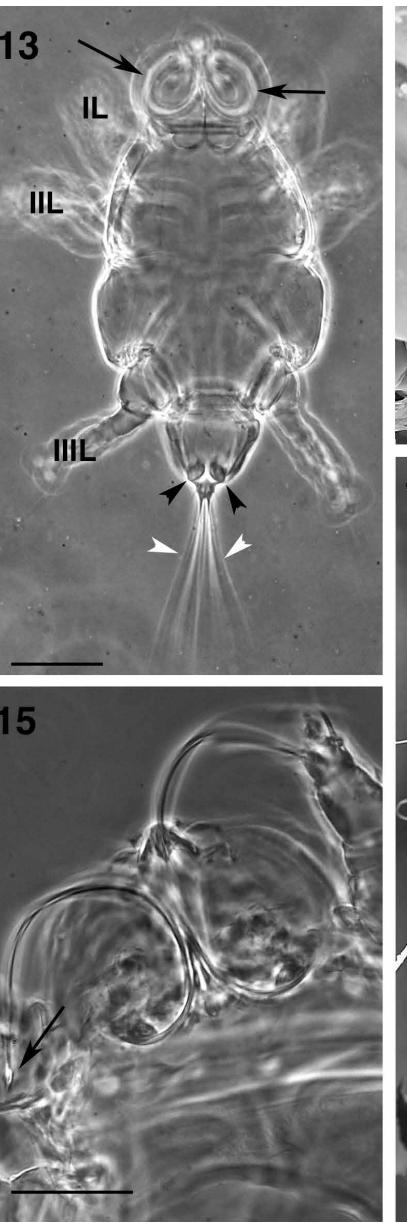
Francesco PORCELLI<sup>1\*</sup>, Ernesto RAGUSA<sup>2</sup>, Anna Maria D'ONGHIA<sup>3</sup>,  
Steve MIZZI<sup>4</sup> & David MIFSUD<sup>5</sup>

## *Centrouropoda almerodai* in Panama... on Palm weevil (*R. palmarum*)



Presencia de *Centrouropoda almerodai* y *Glyptholaspis* sp.  
 (Acarí: Uropodina, Macrochelidae) sobre el picudo negro del cocotero  
 (*Rhynchophorus palmarum*) (Coleóptera: Curculionidae) en Panamá

HÉCTOR RODRÍGUEZ-MORELL<sup>1\*</sup>, EVELYN ITZEL QUIRÓS-Mc INTIRE<sup>2</sup>, ALEX EDUARDO DOMINGO-QUIRÓS<sup>3</sup>, REYNALDO CHICO-MOREJÓN<sup>4</sup> & FRANCESCO PORCELLI<sup>5</sup>

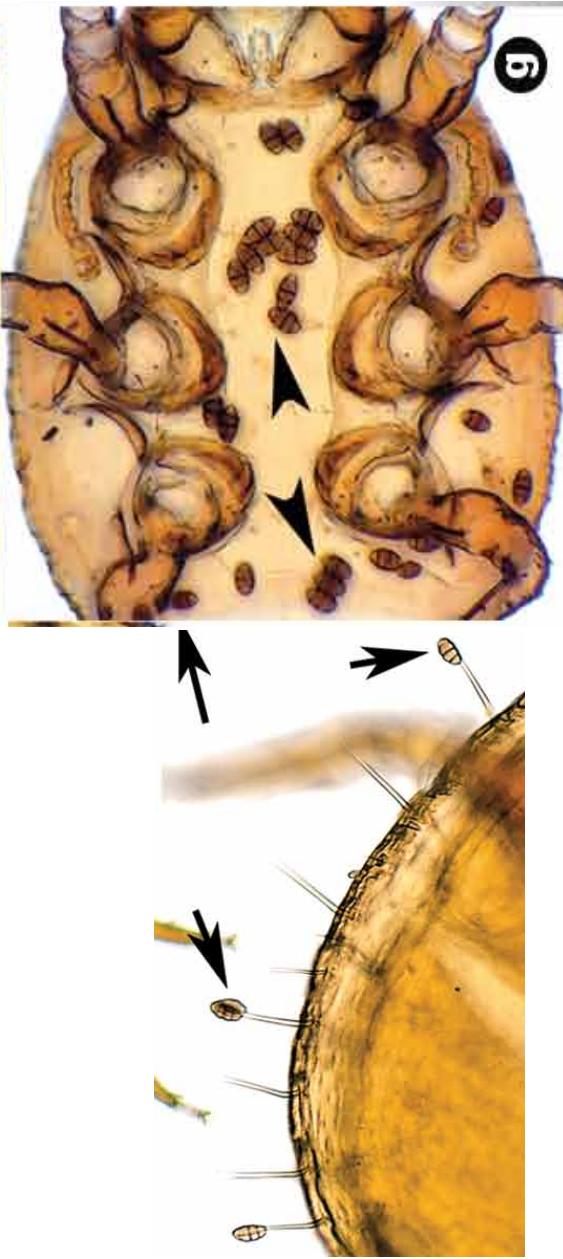
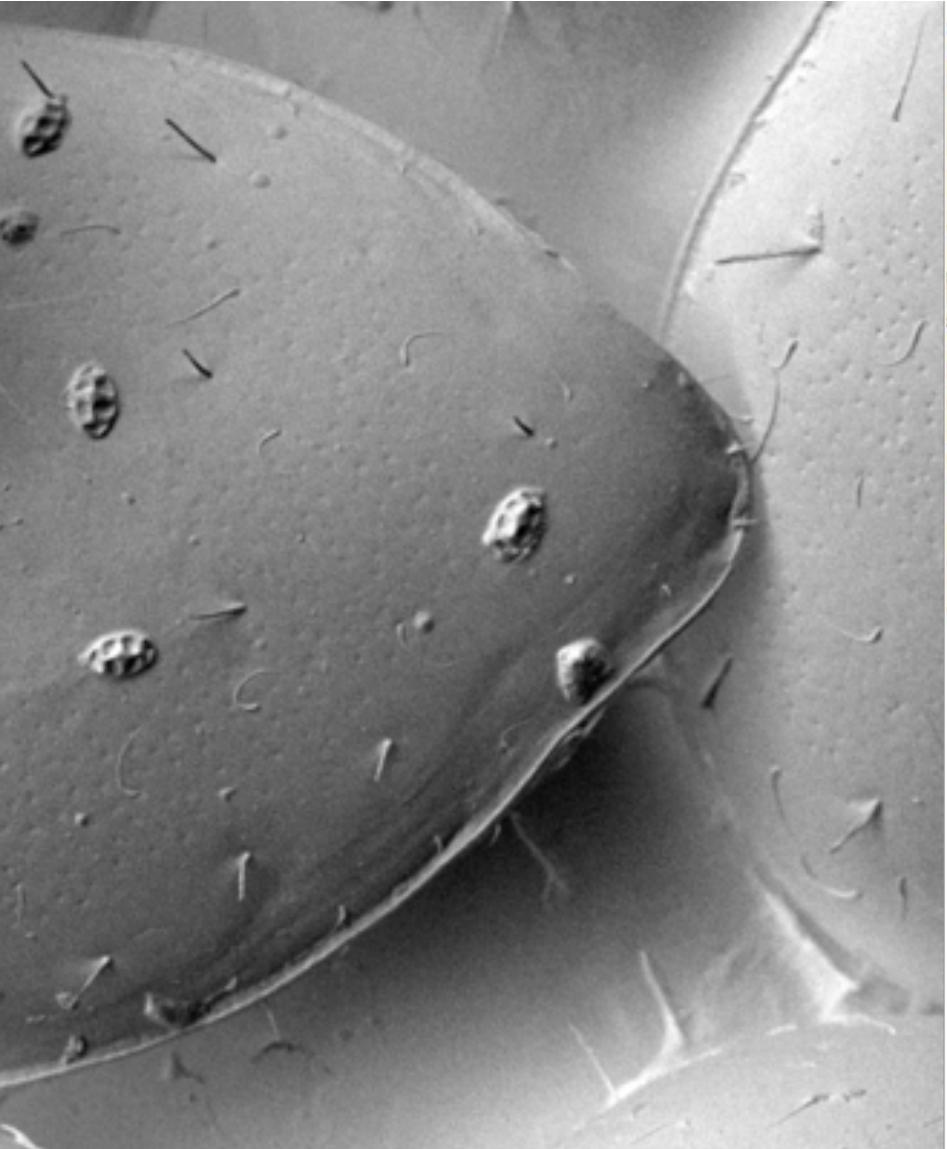


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**ILLUSTRATION OF SOME MORPHOLOGICAL FEATURES IMPORTANT FOR  
IDENTIFICATION OF *RHYNCHOPOLIPUS RHYNCHOPHORI* (EWING)  
(ACARI: PODAPODIPIDAE)**

A. Di Palma<sup>1</sup> and F. Porcelli<sup>2</sup>

2011/08/02 11:48 N D7.0 x2.5k 30 um



# To discuss:

1. Co-introduction of alien organisms (Bacteria, Mite, Fungi)
2. Symbionts may increase the Weevil damages;
3. Symbionts may be invasive organisms by themselves;
4. Do we need to re-consider the approach to pest list and rules?;
5. Many Thanks ☺ ☺ ☺