



Performances study of *Ooencyrtus pityocampae* (Mercet) (Hymenoptera: Encyrtidae) on the new factitious host *Philosamia ricini* (Danovan) (Lepidoptera: Saturniidae) to optimize its rearing

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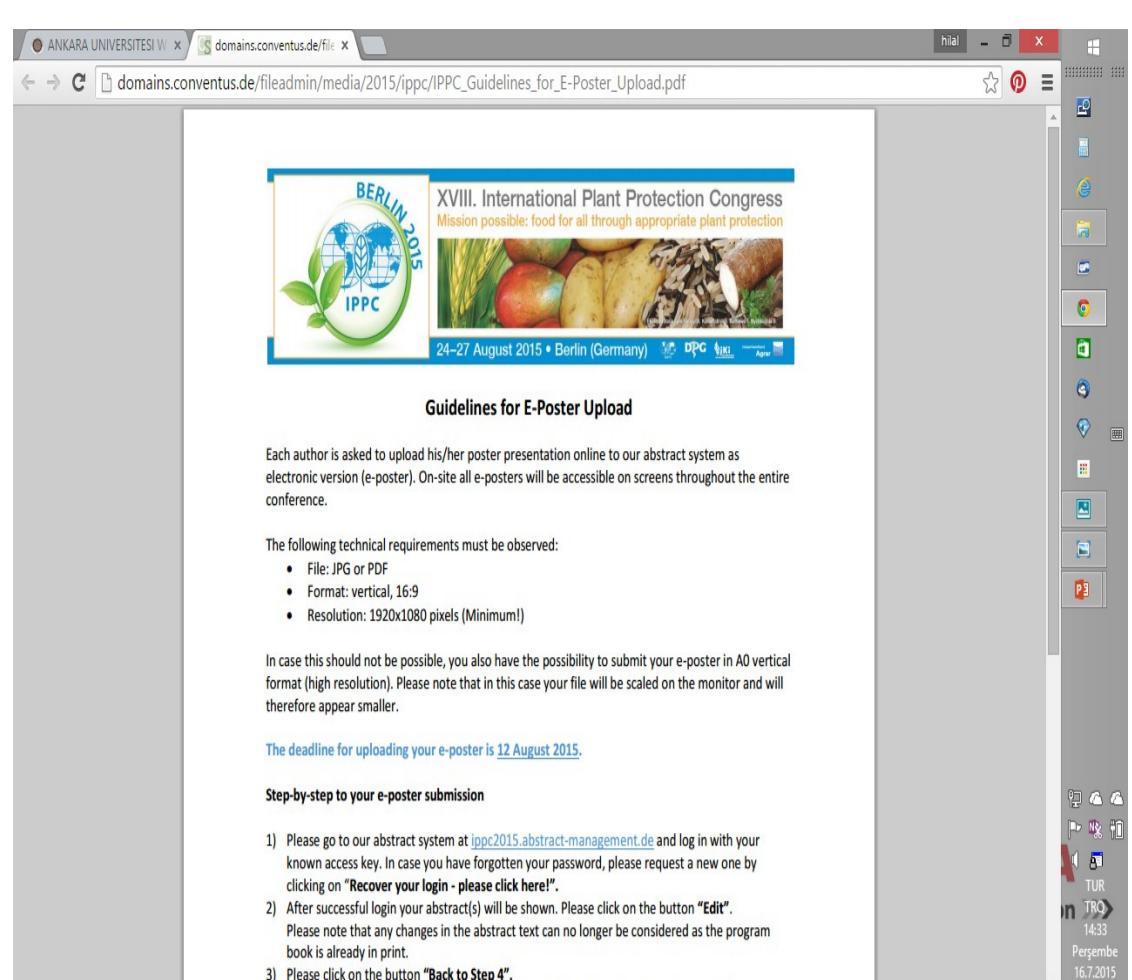
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XVIII. International Plant Protection Congress

Performances study of *Ooencyrtus pityocampae* (Mercet) (Hymenoptera: Encyrtidae) on the new factitious host *Philosamia ricini* (Danovan) (Lepidoptera: Saturniidae) to optimize its rearing

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Introduction: Pine processionary is the most damaging pest of pine trees in the Mediterranean region. *Ooencyrtus pityocampae* is an egg parasitoid of the pine processionary. Studies were conducted to assess the biological parameters of this parasitoid on the new factitious host *Philosamia ricini* under laboratory conditions ($25^{\circ}\text{C} \pm 1$, R H $65\pm 5\%$ and with a L:D 16:8 h photoperiod).

Material and Methods:

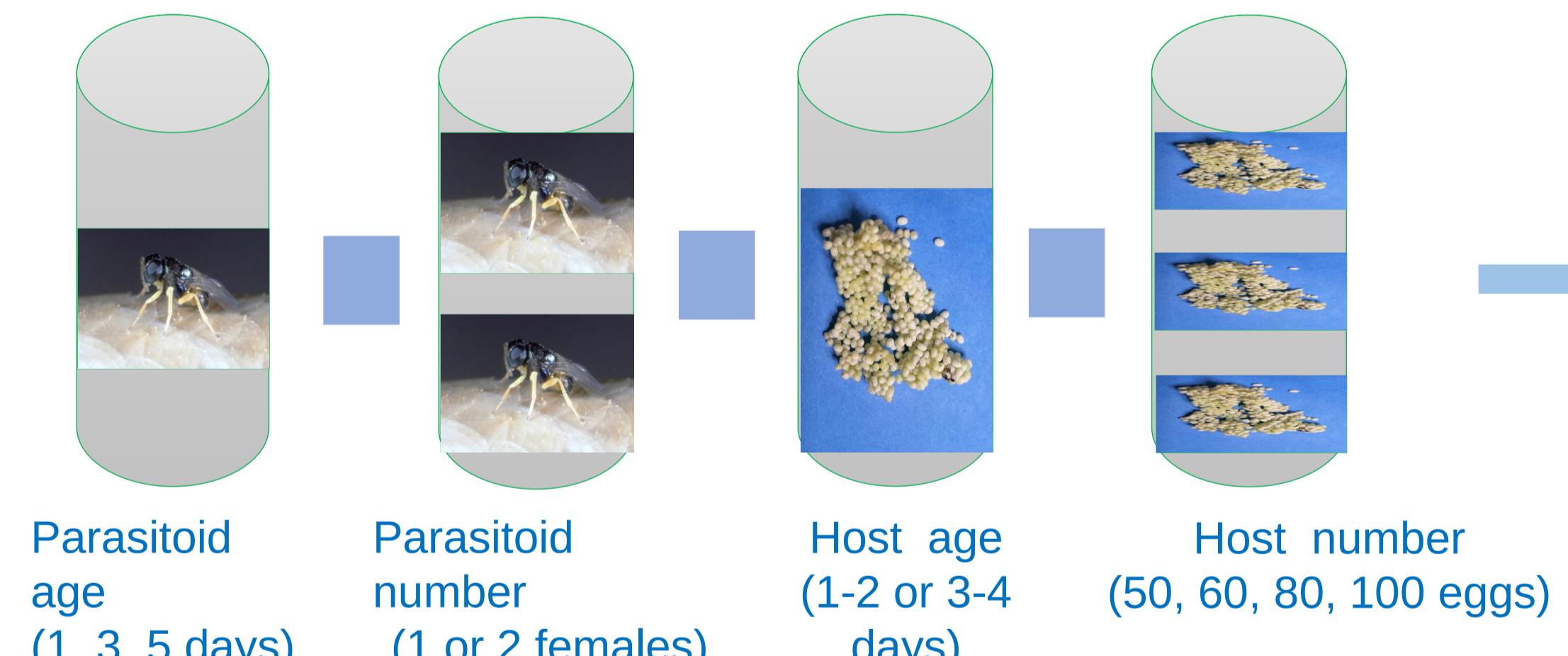
a) The host *Philosamia ricini*



b) The parasitoid *Ooencyrtus pityocampae*



c) Experimental procedure



- ✓ Emergence rate
- ✓ Development time
- ✓ Longevity

Results:

- ✓ Effective-economic rearing of parasitoid

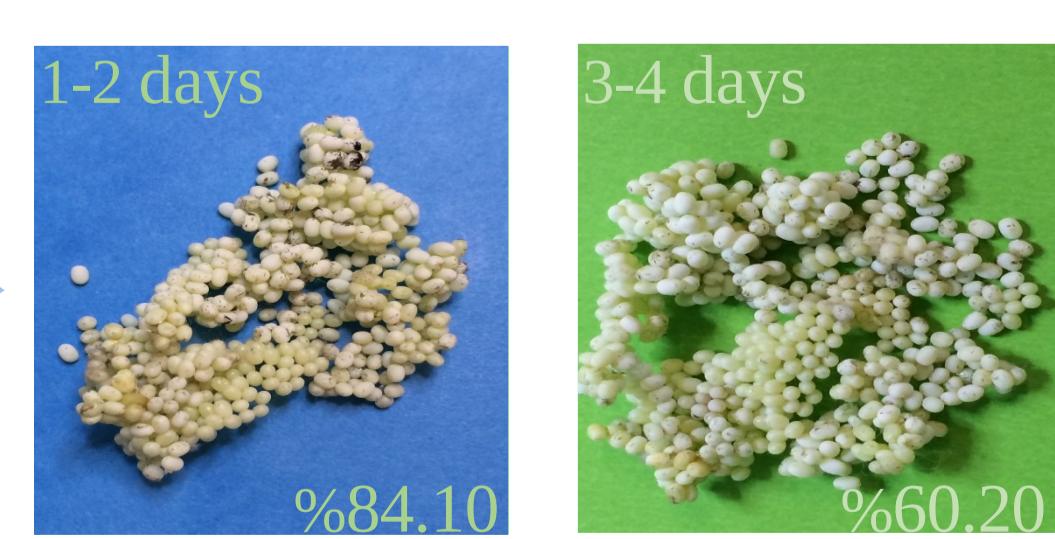
Parasitoid age
• Five days old female

Parasitoid number
• One female

Host age
• 1-2 days old

Host number
• 50 host eggs

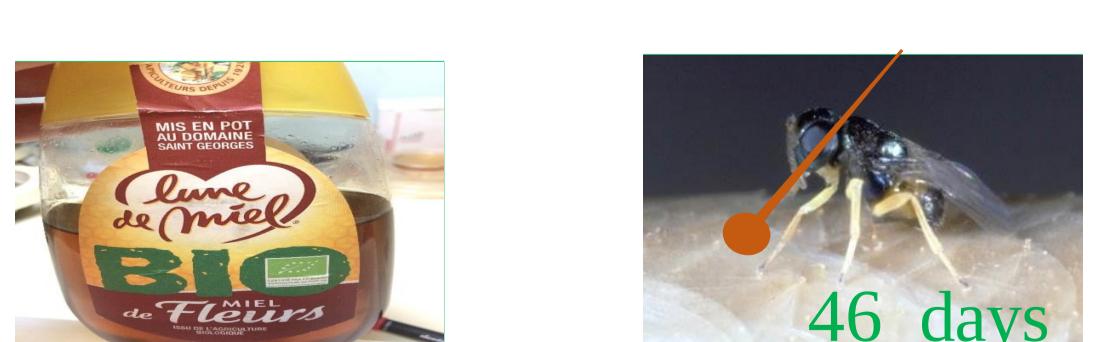
- ✓ Emergence rate



- ✓ Development time



- ✓ Longevity



Conclusion: Mass rearing of parasitoids is an essential step for biological control programs. Based on the results of this study, *Philosamia ricini* is an appropriate host species for the mass rearing of *Ooencyrtus pityocampae*.