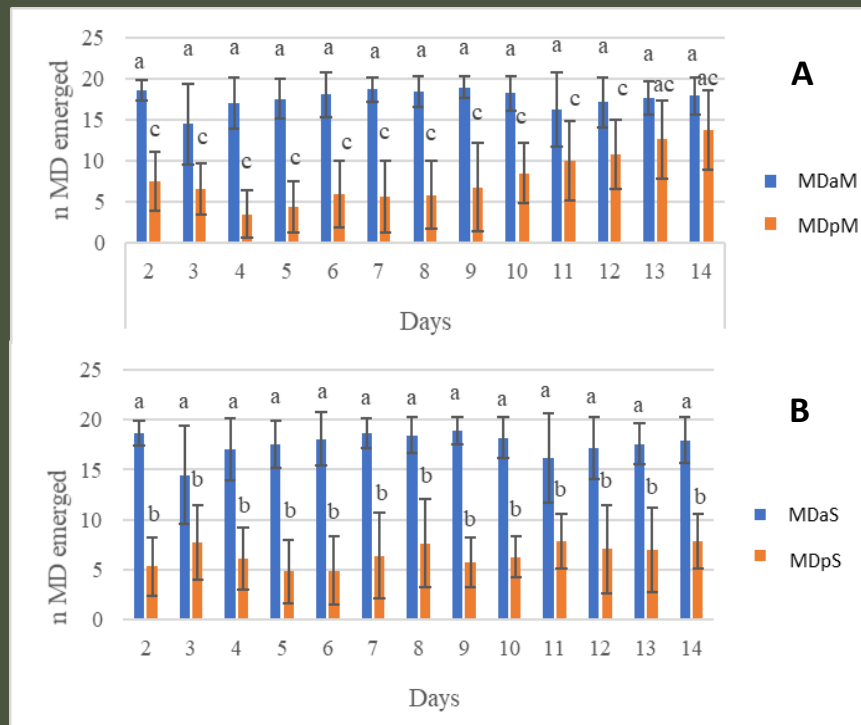


Aims of Phd research

- Parasitization efficiency in relation to the female age for the pupal parasitoids of housefly, *Musca domestica* (MD)
- Field monitoring of MD and related natural antagonists in dairy farms
- Competition between MD and black soldier fly *Hermetia illucens*, (HI) larvae

Biological control
Musca domestica
Pupal parasitoids

Emergence of MD in absence/presence of parasitoids



A. MDaM (MD in absence of *Muscidifurax raptor*) - MDpM (MD in presence of *M. raptor*)
B. MDaS (MD in absence of *Spalangia cameroni*) - MDpS (MD in presence of *S. cameroni*)



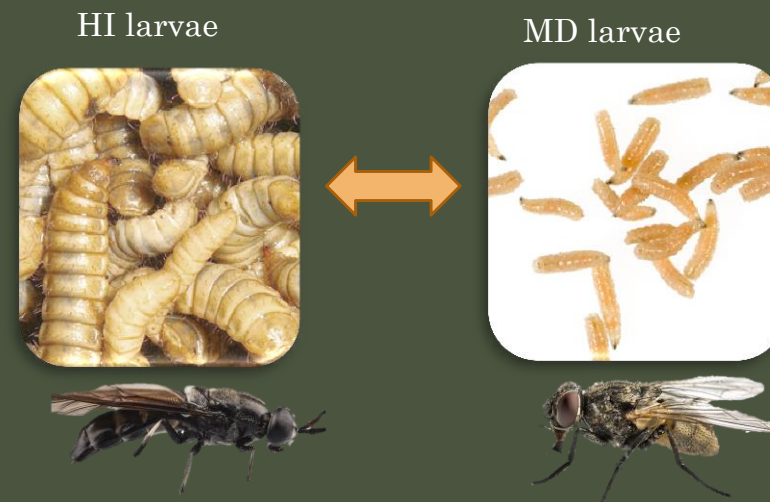
Female of *S. cameroni*



Female of *M. raptor*



Fly larvae competition?



Perspectives

- Further studies to optimize the mass production of the two species of parasitoids, and the timing and methods of delivery in the stables in order to implement the biocontrol of houseflies
- Verify combination of HI larvae and parasitoids to reduce MD populations in livestock

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