

A microscopic image showing several oval-shaped spores of Nosema ceranae within the honeycomb-like structure of a honeybee's intestine. The spores have a distinct dark outer layer and a lighter, granular interior. The background is a complex, textured network of intestinal cells.

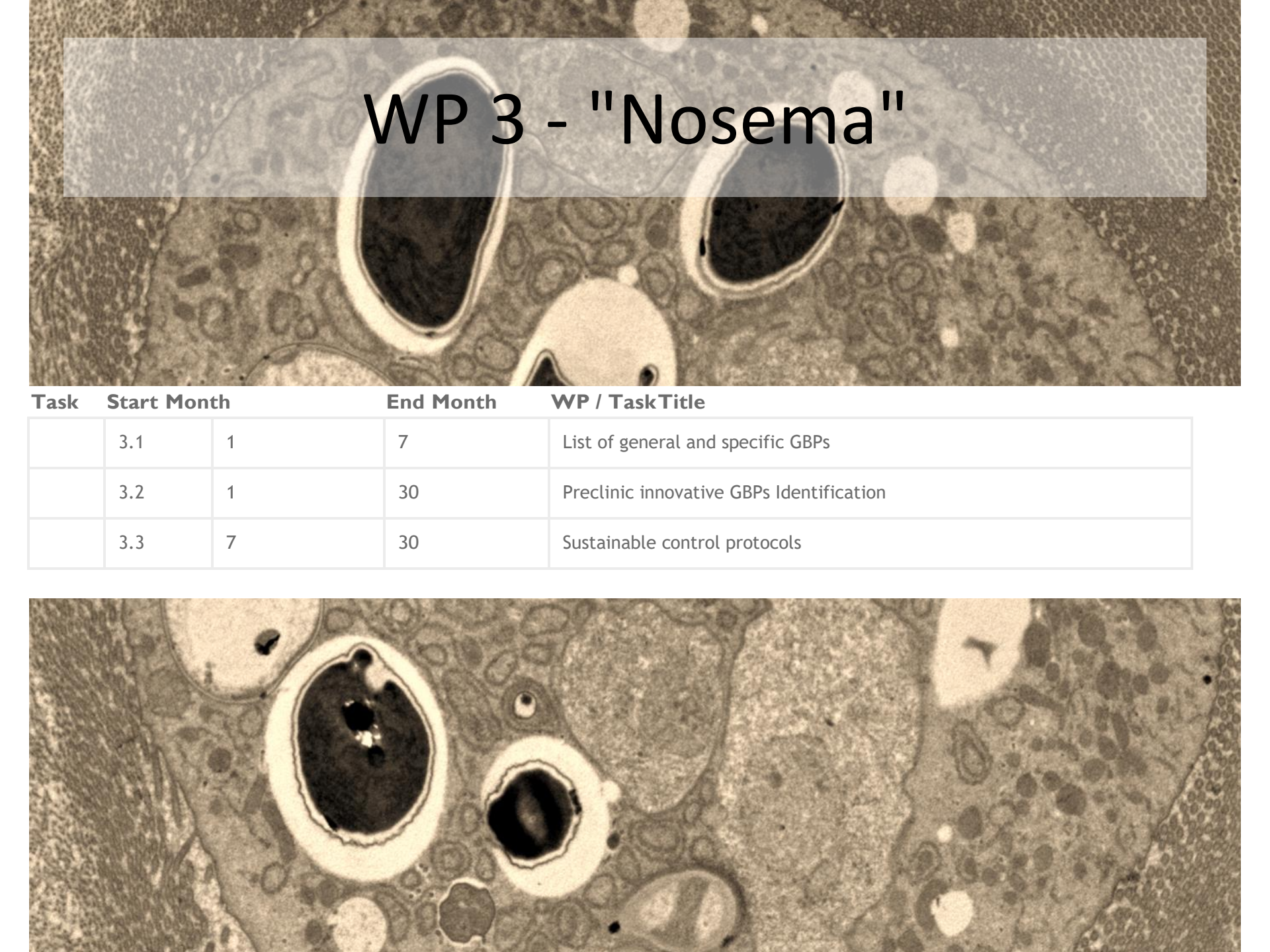
WP 3 - "Nosema"

Nosemosis (mainly **nosemosis C**, due to *Nosema ceranae*) is the most common pathology in southern European countries, affecting adult honeybee and it is associated to a reduced lifespan and winter mortality

WP 3 - "Nosema"

The WP 3 will develop new GBPs to prevent and control nosemosis C at the apiary level:

- To enhance colony development and reduce colony infection
- Include:
 - **Samplings and quantification** of Nosema parasitization in adult honey bees (**percentage of infected bees**) and evolution of the disease in apiaries of the different participating countries
 - **Laboratory analysis** (optical microscopy counts or PCR of individual honey bees)
 - **Treatments with organic compounds** (e.g. plant extracts)
 - **Honey bee queen renewal**

The background of the slide is a high-magnification electron micrograph showing several oval-shaped spores of the parasite Nosema. The spores have a thick, multi-layered wall and a dark, electron-dense interior. They are surrounded by a granular cytoplasm containing various organelles and smaller vesicles.

WP 3 - "Nosema"

Task	Start Month		End Month	WP / TaskTitle
	3.1	1	7	List of general and specific GBPs
	3.2	1	30	Preclinic innovative GBPs Identification
	3.3	7	30	Sustainable control protocols

WP 3 - "Nosema"

We would be very interested in collaborating with the different research groups to:

- Study the evolution of **Nosemosis C** in field conditions in different countries
- To determine if there are **epidemiological relationships** between ***Nosema ceranae*** and ***Lotmaria passim***
- Contrast our methods of diagnosis and determination of the **parasite load** (spore counts are not the most appropriate methods)
- Contrast the **parasite control methods** we use in Spain