

ENERG'IN Research infrastructure for the control of animal and zoonotic emerging infectious diseases through in vivo investigation.

BAILLARGUET INSECTARIUM PLATFORM



The **Baillarguet insectarium platform** is a structure dedicated to understanding transmission and vector control.

It is managed by the ASTRE (CIRAD, INRAE) and InterTryp (CIRAD, IRD) Joint Research Units.

It is a tool integrated into Vectopole Sud, a Montpellier-based network of platforms for the research on arthropods of medical, veterinary and agricultural interest.

Located on the CIRAD site (Baillarguet Campus), the 112 m² insectarium, operating at biosafety level 2, was designed to rear various non-infected arthropod vector species:

- Ticks
- Tsetse flies
- Mosquitoes

The insectarium is also connected to BSL2 (laboratory and animal house) Is in the Re and BSL3 (laboratory) infrastructures allowing to work on infected or non-infected arthropods.

This platform dedicated to research, referenced at the national and international level, is open to academic and industrial partners, both nationally and internationally.

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www.vectopole-sud.fr/ plateformes/insectarium-debaillarguet/

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A tool to respond to the major health challenges for countries in the global North and South



Dedicated to understanding transmission and vector control:

Rearing arthropods

- Developing molecular tools for the taxonomy and diagnosis of pathogens
- Studying arthropod life history traits to understand their bio-ecology
- Studying vector competence through experimental infection with pathogens
- Developing innovative vector control methods and assessing biocides

Vectors models of importance to animal and human health:

- Tsetse flies human and animal African trypanosomosis
- Mosquitoes of the genus Aedes and Culex: West Nile, Dengue, Zika, Chikungunya
- Dicks: African swine fever, Crimean Congo hemorrhagic fever
- @ Culicoides: bluetongue, African horse sickness, Schmallenberg virus



Biosafety Level 2 facilities:

7 multi-purpose temperature and humidity-controlled rooms with controlled lighting 2 rooms fitted with climate chambers for tick rearing and studies of life history traits The insectarium is also connected to level 2 animal houses and level 2 and 3 laboratories

Products and services:

- Weeks of access to the platform
- Supply of arthropod batches: tsetse flies, hard ticks, mosquitoes and soft ticks
- Personalized training: vectors rearing, experimental infections, arthropod identifications



A referenced platform:

- On an international level by FAO (Food and Agriculture Organization of the United Nations) AIEA (International Atomic Energy Agency) **OIE** (World Organization for Animal Health)
- On a national level by **DGAL** (French food standards agency) **EMERG'IN** Vectopole Sud

