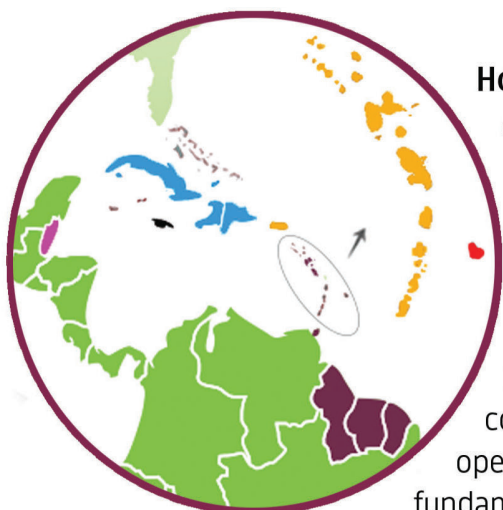




CaribVET, Caribbean animal health network



How can fundamental research help strengthen animal disease surveillance and control networks?

Biodiversity hotspots are often associated with the emergence of new pathogens. The Caribbean, which includes territories with highly contrasting ecological and socioeconomic situations, is one example. Research can help improve surveillance and control of such diseases by combining the most fundamental studies with the most operational applications. This integrative approach involves fundamental research, and also decision-makers, managers and surveillance staff. The CaribVET regional network is one such approach.

PP 20

Partners



Ministries and veterinary services in the 33 countries and territories in the Caribbean¹

Universities > University of Guyana; University of the West Indies.

Research centres > Centro Nacional de Sanidad Agropecuaria (CENSA, Cuba); CIRAD, Emerging and Exotic Animal Disease Control (UMR CMAEE), Guadeloupe.

Regional organizations > Caribbean Community (Caricom); Pan-American Health Organization (PAHO); United States Department of Agriculture, International Service (USDA-APHIS-IS).

International organizations > Food and Agriculture Organization of the United Nations (FAO); World Organization for Animal Health (OIE); Inter-American Institute for Cooperation on Agriculture (IICA-CGIAR).



Associates

Europe > Centre de Recerca en Sanitat Animal (CReSA, Spain), Instituto de Biologia Experimental Tecnol6gica (IBET, Portugal), Instituto de Tecnologia Qu6mica et Biol6gica (ITQB, Portugal), Agriculture and Veterinary Information and Analysis (AviaGIS, Belgium), Ecole des hautes 6tudes de sant6 publique (EHESP, France), INRA (France).

French overseas regions > INRA, Institut Pasteur, Centre Hospitalier Universitaire, CHU, Agence R6gionale de Sant6 (ARS), Universit6 Antilles-Guyane (UAG).

International > CIRAD, in Guadeloupe, is the world reference laboratory for heartwater. It is an OIE collaborating centre for the diagnosis, epidemiology and control of tropical animal diseases



Beneficiaries

Policy-makers and veterinary services are able to build their surveillance and diagnosis capacity thanks to a network of laboratories, methods and tools developed by CaribVET. The reactivity and cost:benefit ratio of installations have been improved.

Livestock farmers benefit from the latest knowledge generated by research and from recommendations.

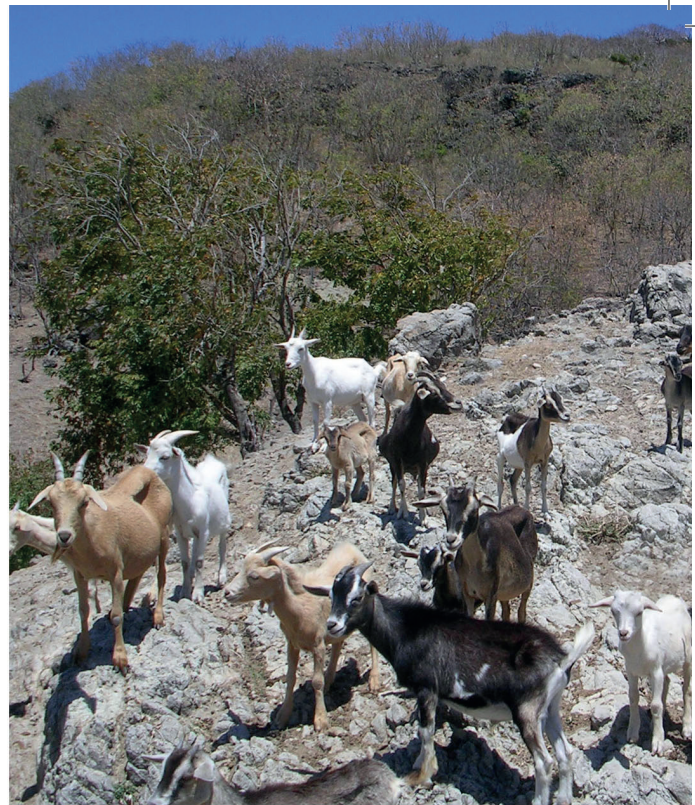
Each and every animal health stakeholder in the Caribbean has access to the information and tools produced by CaribVET.

Students, future management staff and researchers can build their scientific and technical knowledge in the fields of epidemiology and diagnosis, through exchanges and training.

1. Anguilla, Antigua, Aruba, Bahamas, Barbados, Belize, Bermuda, Bonaire, British Virgin Islands, Cayman Islands, Cuba, Curaçao, Dominican Republic, French Guiana, Grenada, Guad yana, Haiti, Jamaica, Martinique, Montserrat, Nevis, Puerto Rico, St. Eustatius, St. Kitts, St. Marteen, St. Vincent and the Grenadines, St. Lucia, Surinam, Trinidad and Tobago, Turks and Caicos Islands, US Virgin Islands

Expertise and technical skills

- > Diagnosis and surveillance of priority animal and zoonotic diseases: avian influenza and Newcastle disease, classical swine fever, ticks (*Amblyomma variegatum*, *Rhipicephalus (Boophilus) microplus*) and tick-borne diseases (heartwater, anaplasmosis, babesiosis); veterinary public health (rabies, salmonella and leptospirosis) and emerging diseases (porcine epidemic diarrhoea).
- > Epidemiological surveillance: databases, guides and protocols, network assessment, regional surveys, etc.
- > Tools & database development: risk assessment, priority diseases, network assessment tools, expertise databases.
- > Training centres: epidemiology, laboratory diagnoses, quality assurance, simulation exercises (sample shipment, emergency preparedness), biosecurity.
- > OIE reference laboratory for heartwater, OIE collaborating centre for the diagnosis, epidemiology and control of tropical animal diseases (CIRAD) and OIE collaborating centre for the reduction of zoonotic risks following disasters (CENSA).
- > DGAL approved laboratory for serological diagnosis of West Nile (WN) in equines and real-time PCR diagnosis of avian influenza, COFRAC accreditation (standard 17025) for diagnosis of heartwater, AI and WN.



T. Lefrançois/CIRAD

Some current projects

Building health research capacity in Guadeloupe • Epigenesis, European Commission, FP7, 2013-2016, € 3.5M

By building capacity for research and transmission of knowledge relating to "one health" (animal and human), the project will help increase diseases prediction, surveillance and control capacity in the Caribbean. The eventual aim is to establish a Caribbean centre of excellence on vector-borne and emerging diseases.

One Health, One Caribbean, One Love • ACP project, Science and Technology, UWI, 2014-2016, € 1M

The aim is to promote a "One Health" approach to zoonotic and food-borne disease surveillance, diagnosis and response. Expected results are to improve intersectoral collaboration between medical, veterinary, environmental and wildlife professionals, increase capacity to identify and respond to transboundary animal and zoonotic diseases and increase laboratory capability to diagnose foreign and endemic animal and zoonotic diseases.



CIRAD



CIRAD

Cattle tick resistance to acaricides, tick-borne disease surveillance and control • ResisT, 2013-2015, Fonds de Coopération Régionale, € 214k

Cattle ticks (*Rhipicephalus (Boophilus) microplus*) are widespread throughout the tropical and inter-tropical zones. They can transmit two serious diseases to cattle (babesiosis and anaplasmosis), and are known to develop resistance to acaricides. The project has allowed itself two years to take stock of the situation as regards resistance to acaricides in the Caribbean and establish a new in vitro diagnostic test so as to identify this problem rapidly, given that it is of concern for farmers, veterinarians and researchers. The project also aims to develop strategies to improve surveillance and control of TBDs in ruminants with a view to slowing down the development of resistance.



CIRAD

Working together for tomorrow's agriculture

CaribVET, Caribbean animal health network Guadeloupe

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CaribVET website
<http://www.caribvet.net/>

Regional Office
<http://antilles-guyane.cirad.fr/>

A platform is...
a set of partners keen to work together;
shared prospects and objectives;
a commitment in terms of human resources,
equipment and funding; a shared research
topic; a specific geographical field;
a range of skills and activities.

www.cirad.fr