

## CHIEF DISEASE INVESTIGATION OFFICE Palode



### *Referral Laboratory of Animal Husbandry Department, Kerala*

Chief Disease Investigation Office, situated at Palode, Thiruvananthapuram, is the referral diagnostic laboratory of the Department of Animal Husbandry, Government of Kerala, which was started in 1966 to control and coordinate the disease diagnostic activities in animal husbandry sector in the entire state.

### **Empowerments**

- **Nodal office** of Southern Regional Disease Diagnostic laboratory (**SRDDL**), Bangalore
- **Collaborating unit** of **NIVEDI** - National Institute of Veterinary Epidemiology And Disease Informatics, formerly known as PD\_ADMAS, Bangalore under ICAR.
- **Network Unit** of All India Coordinated Research Project on **Foot and Mouth Disease** (AICRP on FMD) under ICAR.
- CDIO functions as the State Referral Laboratory under Animal Husbandry Department with technical control over the other Regional Disease Diagnostic Laboratories at Thiruvalla, Palakkad and Kannur. The office also functions as RDDDL for the Southern districts of the State; Thiruvananthapuram and Kollam.

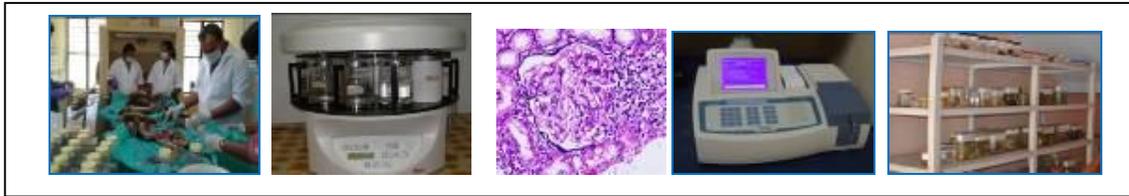
### **LABORATORY PROFILE & DIAGNOSTIC FACILITIES**

Chief Disease Investigation Office possesses four well-equipped laboratory divisions to undertake various diagnostic activities and referral support to field veterinarians. Each laboratory functions under the direct control of a Veterinary Surgeon with the supervision of a Disease Investigation Officer.

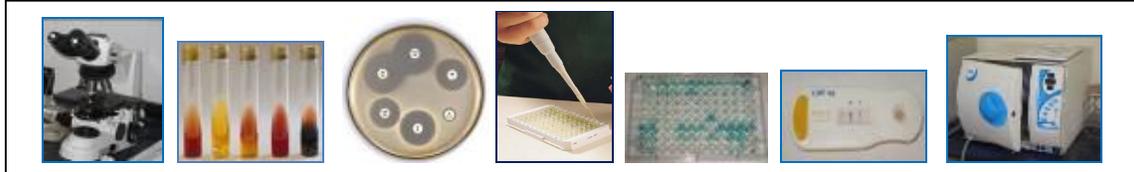
The **Pathology Laboratory** carries out clinical pathology studies, post-mortem examinations of carcasses, vetero-legal cases, histopathology studies of tissue samples

etc. The Biochemistry wing of the laboratory is proficient in assessing complete biochemical profile including mineral and enzyme status of different species of livestock and poultry. The exhaustive museum repository of autopsy and biopsy specimens of this lab is a major attraction in many exhibitions. The rare collection of histopathological and neoplastic slides maintained in the lab acts as referral standard to trainees.

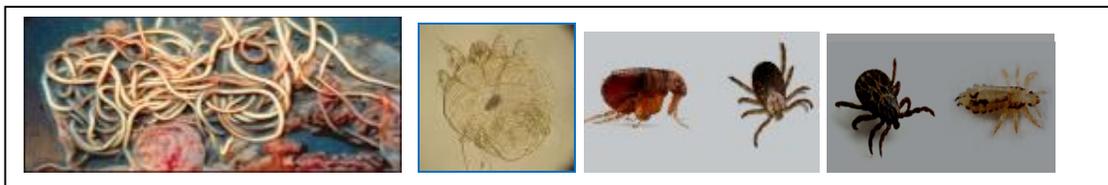
The telepathology unit of the institute offers faster online referral support to field veterinarians and other laboratories.



The **Microbiology Laboratory** offers excellent services for isolation and identification of pathogenic organisms from various clinical samples and autopsy cases, smear microscopy, antibiograms studies, sterility testing etc. It aids in diagnosis of diseases like Anthrax, Haemorrhagic Septicaemia, BQ, Salmonellosis, Aspergillosis, colibacillosis and many more. the laboratory has the potential to provide field isolates of various pathogens for any future researches.



In the **Parasitology Laboratory** of the institute, routine examinations for haemoprotozoans, ectoparasites and endo-parasites are carried out. ELISA for Toxoplasmosis, Lateral flow tests for Canine Ehrlichiosis, Modified AFB staining for Cryptosporidiosis etc are some of the new up gradations in this division.



The **Toxicology Laboratory** of this Institute has first-rate facilities for the detection of plant toxins especially Nitrates and heavy metals apart from outstanding facility for analysis of Aflatoxin B1, B2, Ochratoxin, Citrinin etc in feed materials. This division also boasts a Fluorometer for rapid and quantitative analysis of mycotoxins in feed samples by immunoaffinity column method.



### Diagnostic facilities at CDIO for specific diseases

Disease	Species	Sample	Test
Brucellosis	cattle, sheep, goat, ovine & pigs	Serum	RBPT, Ab-ELISA, LFT
	Dogs	Serum, whole blood, plasma	LFT
IBR	cattle	Serum, Plasma, Milk	Ab-ELISA
PPR	Goat	Blood, nasal swab, rectal swab, lungs, liver, spleen, serum, spleen, tonsils,	Ag-ELISA, PCR
CSF	Pigs	lungs, kidney, mesenteric	Ag-ELISA, PCR
Rabies	All species	brain, saliva	LFT, FAT, PCR
Leptospirosis	Cattle	Serum	IgM ELISA, PCR
	Dogs	Serum	Ab-ELISA, PCR
Babesia	Cattle	blood smear, serum	smear examination, Ab-ELISA
	all species	Whole blood	PCR
Anaplasmosis	Cattle	blood smear, serum	smear examination, Ab-ELISA, PCR
Ehrlichiosis	Cattle	Blood smear, whole blood	smear examination, PCR
	dogs	blood smear, whole blood, serum, plasma	smear examination, PCR, LFT
Theileriosis	Cattle	blood smear, whole blood, serum	smear examination, PCR
Johnes disease	cattle, goat	Serum, Plasma, Milk	Ab-ELISA
Tuberculosis	cattle	whole blood, serum	LFT, gamma interferon, Ab-ELISA, PCR
	elephant	serum, plasma, whole blood	LFT
	Poultry		PCR
NDV	poultry	cloacal swab, spleen, kidney, oropharynx	LFT, PCR
IBD	poultry	cloacal swab, bursa	LFT, PCR
IB	poultry	lungs, trachea, kidney, cloaca	LFT, PCR
AIV	poultry	Tracheal swab, cloacal swab, spleen	LFT
H5 AIV	poultry	Tracheal swab, cloacal swab, spleen	LFT
Mycoplasmosis	Chicken and turkey	serum, lungs	Ab-ELISA, PCR
CCPP	Goat	Serum, lungs	Agglutination test, PCR
Salmonellosis	poultry	blood	RPAT
CDV	Dogs	nasal swab, conjunctiva, urine, serum	LFT

Parvo	Dogs	rectal swab, feces	LFT
Corona virus infection	Dogs	nasal swab, rectal swab, feces	LFT
FMD	all species	tissue	ELISA
Anthrax	All species	blood smear, blood	microscopical examination, PCR
Duck plague	Ducks	liver	PCR
Mareks disease	Poultry	feather follicle	PCR
Avian leukosis Complex	Poultry		PCR
Salmonellosis	Poultry	whole blood, eggs, intestine, liver	PCR, Isolation and identification
Reimerellosis	Poultry	tissue, blood	PCR
swine pox	pigs	scabs	PCR
Leishmaniasis	Dogs	serum	Ab-ELISA
PRRS	Pigs	serum	Ab-ELISA
Blue tongue	sheep and goat	serum	Ab-ELISA
Feline panleukopenia	Cat	faeces	LFT
Feline leukemia	Cat	whole blood, plasma, serum	LFT
Colibacillosis	All species	whole blood, eggs, liver intestinal content,	isolation and identification, PCR
Enterotoxaemia	Goat	intestine	PCR, ELISA
porcine epidemic diarrhoea	pigs	intestine	PCR
Transmissible gastroenteritis	Pigs	intestine	PCR
Porcine respiratory disease	pigs	nasal swab, lungs	PCR
haemorrhagic septicaemia	all species	whole blood, blood smear	isolation and identification, smear examination, PCR

