

LOCAL STARTUP ASSISTANCE

The University of Poonch Rawalakot works to support local businesses by providing them with relevant education, mentorship initiatives, training workshops, and university resource access.

1. NO-COST MENTORSHIP INITIATIVES:

To empower farmers to enhance their crop productivity thereby alleviating poverty; The Faculty of Agriculture at the University of Poonch Rawalakot primarily focuses on delivering free technical assistance to farmers in terms of seed selection, fertilizer' use, and disease control at their doorsteps. The department of Plant Pathology offers complimentary services to small-scale growers, addressing disease-related issues faced by local farmers. The dedicated efforts of experts, through free consultations and ongoing technical support, have significantly contributed to improving apple crops on small farms and at the household level with resultant noteworthy increase of 30% in apple production.



Display of various varieties of apple during community training workshop for food processing, disease preservation and nutrition protection

2. UNIVERSITY RESOURCES ACCESS:

Through its many laboratories, the University of Poonch Rawalakot provides free services to the local population in an effort to reduce poverty.

2.1.Free Veterinary diagnostic services The Faculty of Veterinary and Animal Sciences at UPR has well-established Veterinary labs which provide free of cost diagnostic services to the local community. Generally, samples are sent in for hematological analysis of the animal's blood, milk analysis for mastitis diagnosis, and fecal examination for gastrointestinal parasites. These labs are equipped with advanced technology equipment including;

- a. **Polymerase Chain Reaction (PCR):** PCR is used for cloning, sequencing, forensics, microarrays, genotyping, and validation of paternity.
- b. **Enzyme-linked immunosorbent assays (ELISA):** ELISA is used in tracking disease outbreaks, identifying and measuring the presence of antibodies in blood, and identifying and estimating the levels of tumor markers and hormones.
- c. **Computer-Assisted Semen Analyzer (CASA):** CASA is a cutting-edge software application and imaging equipment that analyzes hundreds of distinct sperm characteristics and visualizes sperm motility.
- d. **Automated Veterinary Hematology Analyzer:** This equipment is used to analyze animal blood and can provide findings for 29 different blood parameters.
- e. **Automated Biochemical Analyzer:** With the aid of this equipment, hepatic dysfunction can be diagnosed using serum biochemical and liver function tests.
- f. **Rose Bengal Plate Test:** It is a rapid test for the diagnoses of Brucellosis in animals.



Glimpse of Animal's disease diagnostic services at Faculty of Veterinary and Animal Sciences



Various equipment in Veterinary Medicine lab

Lab report for diagnosing Brucellosis in a Cow



University of Poonch Rawalakot

CLINICAL VETERINARY MEDICINE
RESEARCH/DIAGNOSTIC LAB



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Lab Report No: 0305	Date submitted: 20-12-2022
Submitted by: Prof. Dr. Raheem	Received by: Dr. Muhammad Waqas
Type of sample: Blood	Test required: Brucellosis

Animal Type: Cow	Sex: ♀
Breed: Jersey	Age: 3 years

Test	Interpretation
Rose Bengal Plate Test for diagnosis of Brucellosis	The sample is thoroughly examined and declared negative (-).

Lab Incharge: Dr. Muhammad Waqas

Signature & Date:

DR. MUHAMMAD WAQAS
Lecturer (Veterinary Medicine)
Faculty of Veterinary & Animal Sciences
The University of Poonch, Rawalakot (AJK)

2.2. Zero-cost Milk and Water testing services

The Department of Food Science, Faculty of Agriculture is actively engaged in providing milk and water testing facilities to the farmers and local community. Generally, samples are sent in for milk analysis for adulterants, water analysis for drinking quality.

2.3. Zero-cost Soil testing services

The department of soil and environmental Sciences, Faculty of Agriculture provides soil Testing services for productivity analysis, and offers technical support via a pertinent and all-encompassing approach.



Milk, Water and Soil testing services rendered by Faculty of Agriculture

Lab report for checking adulteration in milk sample

Galiscan SLP60
 Serial Number 1102
 Calibr 1 Cow
 Results
 Fat.....03.02%
 SNF.....07.13%
 Density.....24.39
 Lactose.....03.90%
 Salts.....00.59%
 Protein.....02.60%
 Added Water....14.80%
 Temp. Sample...12.5
 Freez. Point...-0.443

University of Poonch Rawalakot

DEPARTMENT OF FOOD SCIENCE AND TECHNOLOGY
 MILK PROCESSING AND ANALYSIS UNIT

✉:saimarafiq@upr.edu.pk

52	Date submitted: 18-May 2022
Mr. Zubair	Received by: Mr. Sheraz Hussain
Type of sample: Cow Milk	Test required: Adulteration

Test	Interpretation
1) COB	Positive (+ve)
2) Soap Test	Negative (-ve)
3) Urea Test	Negative (-ve)
4) Detergent Test	Negative (-ve)
5) pH	6.0
6) APT	positive (+ve)
7) Lacto Scan Test	Attached
8) Remarks	Overall there was no adulteration but due to storage for long time, clotting has occurred.

Lab Incharge: Dr. Saima Rafiq

Signature & Date:


 ASSISTANT PROFESSOR
 FACULTY OF AGRICULTURE
 UNIVERSITY OF POONCH