University Pretoria Poultry Reference Centre NEWSLETTER 1 MARCH 2005

Staff

Dr. Shahn Bisschop continues as Director of the PRC and Senior Lecturer in Poultry at the University of Pretoria. As from January 2005 Mrs Alida de Meillon handles reception, general enquiries, administrative and departmental secretarial as well as student matters. Mrs Hanli Moolman handles secretarial, administrative, financial matters and enquiries regarding the Poultry Reference Centre. Dr. Stan van Blerk joined the PRC in a part-time capacity in January 2003 and has been a great help in dealing with day-to-day diagnostic work. Dr. van Blerk has agreed to continue his association with the PRC again during 2005. Dr. Chrissie Makwiti left to pursue a career in the commercial sector. The post of State Veterinarian at the PRC, as well as Senior Lecturer remains vacant. Dr Michelle Seutloali was appointed as Clinical Assistant at the PRC starting 1 March 2005, to assist in day-to-day activities.

Remember it's the little things in life that really matters!
Whatever our hands touch —- We leave fingerprints!
Whatever we say we leave heart prints!

In the Serology Laboratory working as a team to ensure that all poultry serology samples are handled promptly and accurately using the Idexx Database are Mrs Elsa Cornellius, Mrs. Antonette van Wyk, and Miss Riette Delport (replacing Miss Marna Laing) appointed to us from head office at the Directorate of Animal Health. Mrs Elsa Cornellius is also in charge of all poultry virology cases.

In our Bacteriology Laboratory Miss Janita Greyling is still pulling the wagon, and we can assure you that extra effort is given to ensure that results are available in a minimum time frame and definitely as accurate as possible.

Diagnostic and Research Activities

The PRC has been active in the diagnostic field. Veterinarians do post mortems on a daily basis as well as farm visits from time.

Dr Bisschop together with his team, were active in the research field during 2004 with Mr Leonard Mogoje doing extensive work, with help from Mr Gideon Masibe to ensure that everything runs well at the Research facilities.

Two full-time MSc students joined us in 2004. Mr Cromwell Purchase is working on *Salmonella Gallinarum* (Fowl Typhoid) and Miss Keamogetse Modise, has researched the implementation of a Newcastle disease (ND) vaccination program among rural communities in the North West Province.

A number of contract research projects were carried out for clients, principally for registration purposes. Many of the products tested have been registered for use in South Africa.

RECENT Newcastle disease (ND) OUTBREAK IN SOUTH AFRICA

(ARTICLE BY DR S P R BISSCHOP)

During 2004 outbreaks of Newcastle disease (ND) were reported in "village chickens" around the Hammarsdale area of Kwa Zulu Natal, a few outbreaks also affected commercial flocks. In late 2004 and early 2005 two outbreaks of Newcastle disease (ND) were reported in broilers on the Highveld, one in the Rustenburg area and one to the East of Gauteng. In both cases, there was significant mortality as a result of the disease.

There will be an article on Newcastle disease (ND) in the next issue of the poultry bulletin. Our recommendations for vaccination against Newcastle disease (ND) can be obtained from the PRC on request or from our website

www.ais.up.ac.za/vet/poultry/

MATTERS OF IMPORTANCE

PRICE DECREASE

There was a price decrease on the serology Idexx Elisa kits – new price list attached, prices effective from 1 March 2005, due to the fact that we are still using stock on hand.

TECHNIQUE FOR BLOOD COLLECTION AND SERUM PREPARATION

1. Blood is collected from the vein found on the underside of the wing, just before the first joint.
2. The wing should be stabbed with an 18 gauge needle and the blood collected into the tubes supplied.
3. ***The blood collected into the tube should be at least 20mm deep, but preferably 30 – 40 mm deep.***
4. If samples will reach the laboratory on the same day, no further processing is necessary.
5. If samples will not reach the laboratory on the day of collection then the following steps should be taken:
    a) Using a sterile or clean (wipe with alcohol) piece of wire (paperclip), loosen the clot from the side of the glass by inserting the wire between the clot and the glass and move the wire around the clot.
    b) Leave the tubes **at room temperature** for a further 12 to 18 hours. Separation takes place and the serum looks like straw-coloured water.
6. If samples will take longer than 48 hours to reach the lab.
    a) The serum can be poured off into another sterile tube, or the clot can be removed, after which the serum may be stored in a refrigerator at 4°C.
7. Mark the tubes clearly with the house/flock number, or individual bird or cage number, for identification. Also provide a written history of immunization schedule.
8. During transportation to the laboratory keep the blood or serum as cool as possible, with icepacks in a cool bag.
9. If the serum is frozen, please keep them frozen during transportation.

PRECAUTIONS

1. Do not shake the tubes directly after bleeding the bird, as this causes the red blood cells to rupture (red discoloration of serum) and it invalidates the test.
2. Do not freeze whole blood or allow it to stand for periods longer than 48 hours.
3. Keep the samples away from direct sunlight during transportation. Never keep samples in excessively warm areas.
4. Do not freeze blood destined for Mg, Ms, BWD or Se testing by plate agglutination method as it may lead to false positive reactions.

GOOD RESULTS ARE REFLECTED IN THE QUALITY OF THE SAMPLE.