

HATCHERY MONITORING PLAN

Purpose: To evaluate hatchery sanitation quality by determining microbial load in a hatchery and to monitor quality of day-old chicks

- Air Samples: By exposing media plates to rooms after cleaning & fumigation (media plates NA and SA to be provided by Lab) to assess load of bacteria and mold
- Surface swabs from hatchery equipment, tools, as well as walls & floors of hatcher, setters, chick room, egg room etc, using the autoclaved mold (1 inch x 1 inch) to assess load of bacteria and fungi.
- Fluff samples from hatcher for total bacterial and mold count (total count, coliform count, salmonellae, mould)
- Dead in shell for C/S and detection of MG/MS/NDV/IBV/AIV/Adeno-4 by PCR (6 eggs per setter)
- Day old chicks for serology against ND, IB, IBD, SHS, AE, MG, MS, H5, H7, H9 and C & S of yolk (10 chicks per hatch). The same chicks will be subsequently used for getting pooled swabs and pooled tissues for Salmonella monitoring (PCR detection and isolation)
- Water for bacterial presence (coliforms, Staph, Salmonellae and total bacterial and fungal count){ use 50 ml syringe or sterile bottle}

DIRECTIONS FOR SAMPLING

- For surface swabs, take a sterile 4 ml test tube containing sterile 1 ml normal saline (NS) or BHI Broth (from lab) and dip a sterile swab in it. Then place a sterile mold (1x1inch) on the surface to swab. Using the wet swab mop the area and place the swab in the tube without media. Close the lid, label it and place in a plastic bag. Ship it in a cooler to the lab.
- For air sampling, get disposable media plates (both NA, SA) from the lab and expose at least 2 plates per room for 10 minutes each. Cover back with the lid, label on bottom of the plate and tape it at the corners at two opposite sites. Place in plastic bag and ship to lab.
- For yolk and/or organ culture, send 15 live day-old chicks to the lab.
- For fluff testing place 25 gm of fluff in a plastic bag with zip and place in cooler
- For dead in shell send 6 eggs per egg incubator to the lab
- For water bacteriology and chemical analysis, using send 100 ml of water samples (50 ml syringe or sterile bottle) labeling with the source (Overhead tank before treatment, after treatment, from drinkers)
- To determine colon bacilli count on eggs, 2.5 centimeter diameter circular area of the large end of each of the eggs may be rubbed with a sterile swab moistened with BHI. One swab will be used for five eggs, and four swabs will be pooled to each tube with cap.