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Scaly Leg in Backyard Reared Chicken and its Successful Management

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Scaly leg mite (*Knemidocoptes mutans*) is a small mite, belonging to Sarcoptes group, which usually inhabit underneath the scales of legs. *Knemidocoptes mutans* can also infest any unfeathered parts including the face, beak, ears, eyes, combs and wattles of the poultry. The scaly condition if untreated may worsen to very painful condition, loss of toes and even death. Earlier Shastri *et al.*(1990) reported the infection in backyard poultry birds from Parbhani region. The reports on scaly leg condition in backyard chicken are scanty. The present paper puts on record of scaly leg condition in a local (desi) backyard chicken and its successful therapy.

Case History, Treatment and Discussion

Two non-descript(desi) 6-8 weeks old poultry birds were presented to the College with bilateral hyperkeratosis of legs from tibiotarsal joint to phalanges. The mange lesions on legs and unfeathered parts were thickened, raised, encrusted scales (Fig 1 and 2) further resulted in lameness and unthriftiness.



Fig. 1: Bird showing scaly leg lesions



Fig. 2: Raised thickened scales on legs

The present clinical observations are in akin with the observations of Srinivasan *et al.*(2014).The skin scrapings examination in 10% KOH revealed presence of large number of *Knemidocoptes mutans* mites (Fig 3) which were confirmed by employing the keys of Walker (2003).

Scaly Leg mite (*Knemidocoptesmutans*) is a tiny mite inhabiting underneath the scales of lower leg, foot and on the ground or sometimes on the floor of poultry shed in damp conditions. It then burrows deep in the tissues of legs, causing tunnels and later eats the tissues (Shanta *et al.*, 2006). The affected chicken showed rough, yellowish white crusty materials covering the whole limb up to the toes (Fig. 1). Removal of the crust exposed moist surface of the affected limb with white glistening appearance. The other affected backyard chicken of the flock showed lameness and scale formation. The mite infestation was transmitted from bird to bird through direct contact.



Fig. 3: *Knemidocoptesmutans* mites under microscope

The affected birds were treated with two doses of ivermectin@200 µg/kg b.wt. intramuscularly given a week apart (Srinivasan *et al.*, 2014), multivitamin supplementation through water and local vaseline application to inhibit oxygen supply to the mites. The affected birds showed reversal of symptoms and clinical recovery after second therapy.

Conflict of Interest: All authors declare no conflict of interest.

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