

Herbal formulation for treating Coccidiosis in birds

Sudhakarbhai Gauli and Jeevalbhai Gauli Dang, Gujarat Scout: Pravinkumar Vankar and Pravin Rohit

Coccidiosis is one of the most common and economically important diseases affecting poultry the world over and is caused by protozoan parasites. Sudhakarbhai (50) and Jeevalbhai (58), two herbal healers from Dang have developed herbal formulation to address this problem. Both of them were identified during a Shodh yatra in their region in the year 2000 and have been associated since them.

Vanki is a small tribal village, where Sudhakarbhai (50), a traditional herbal healer lives with his family of six. He has very good knowledge of therapies for various livestock ailments and is helped by his wife in preparing various herbal formulations. Other members in his family include his eldest son who works as a wireman, younger one who looks after their 11 acres of ancestral land in Maharashtra, his youngest son looks after farming in Vanki itself and his daughter who is married. He has around six acres of land where he cultivates *Nagli*, Paddy, Pigeon pea and groundnut.

He also has some cattle head to take care of. He is quite famous for his herbal treatments in the area and is easily approachable. He even has visitors from nearby Surat district.

His family traditionally has been involved in administering herbal medicines for curing various livestock ailments and he learnt the same through the elders. Realising the importance of this knowledge he made extra efforts to imbibe the maximum from his elders. Sudhakarbhai gives herbal medicines for poultry ailments, bloat in animals and diabetes in human.

Eldest among seven siblings Jeevalbhai was born and brought up in his mother's village- Maharajchond, Dangs as his father was a *ghar-jamai* (husband who stays with his parent in law). He has seven members in his family- his wife, two sons, their wives and a grandchild. He owns 16 hectare of land, and some cattle head. Apart from working in his fields he also sometimes works as a casual labourer, getting rice and other food items in return of the labour. Sometimes, he also works in different rural government projects for earning money.

His village Kosambiya has around 300 families, most of which indulge in agricultural activities for their sustenance and grow paddy, *verai*, *tuvar*, maize etc. The main source of water is the river Khapri. The village is surrounded by dense forest and natural subtropical deciduous vegetation. Sometimes the villagers also work as migrant labourers in sugarcane and grape farms in the plains of Gujarat and Maharashtra. With only two *bhagats* (traditional healers) and trained *dais* (midwife), primary health facilities are negligible in the village.

The problem

In coccidiosis, the parasite (commonly protozoa of *Eimeria* species) develops and multiplies in the epithelial cells of the intestine, causing damage to the host's intestine resulting in mortality. Chicks pick up the infection from unhygienic and infected premises. These may have been contaminated previously by other young infected birds or by adult birds that have recovered from the condition. Chemotherapeutic treatments are most usually retorted to for addressing this problem. But with the emergence of drug resistant strains, the problem is getting compounded.

These two herbal healers from a backward district of Gujarat have developed herbal formulations for treating Coccidiosis in poultry and also to increase immunity in them. An elaborate search of literature did not yield any reference of the usage of the said local herb to treat Coccidiosis and accordingly a patent (2387/MUM/2007) was filed in their name for the practice. The practice was validated at the Veterinary College and Research Institute (VCRI), TNUVAS, Namakkal to verify the innovators' claims.

The formulation was evaluated by Matrix Biosciences Pvt. Ltd., Hyderabad. The results were highly promising and the technology was licensed as "Coccicure" to Matrix Biosciences.