MORINGA OLEIFERA, A POULTRY PERFORMANCE ENHANCER HERB: A REVIEW

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ABSTRACT

The aqueous extract and dried powder of Moringa oleifera leaf enhances feed conversion ratio (FCR), feed conversion efficiency and body weight gain in broiler chicks. M. oleifera fed groups show better FCR and body weight gain in vaccinated broiler chicks.

Keywords: Moringa oleifera, body weight gain, FCR.

INTRODUCTION

Moringa oleifera is one of the important plants to be mentioned with priority in medicinal herbs. A folk remedy for catarrh, cancer, gastric ulcer, skin disease, lower blood sugar, nervous condition and diabetes. It is also used to strengthen lever, eye, brain, gall, and immune system and most important. It is also used to expel intestinal worm. The leaves, flower and pod are used as significant source of vitamins A, riboflavin, nicotinic acid, folic acid, pyridoxine, ascorbic acid, beta carotene, calcium, iron and α-tocopherol [1].

There is need for immunomodulator that can safely and selectively enhance a specific class or subclass of immunocyte in man and animal. In Ayurveda, M. oleifera, possesses antimicrobial, antiinflammatory, antioxidant, CNS depressant, antihyperlipidaemic, anticancer, antihepatotoxic and anti ulcer property. It can be presumed that the plant working through immune system [2-4].
Medicinal plant *Moringa oleifera*

*Moringa oleifera* is a traditional Indian herb used in Ayurved with multiple medicinal properties. It is used as anti allergic, anti cancer, antihyperlipidaemic, anti diabetics, and anti inflammatory. The herb is also known to have tonic properties.

**Investigations exploring the medicinal property of the herb**

Faizi *et al.* [5] gave that bioassay–guided analysis of an ethanolic extract of leaves showed the presence of two nitrile glycosides, niazirin and niazirinin and three mustard oil glycosides, 4-[(4'-0-acetyl-α-L-rhamnosyloxy) benzyl] isothiocyanate, niaziminin A and B.

Pramanik and Islam [6] worked on aqueous extract of the mature flowers and find that it contain free natural sugars D-mannose and D-glucose in the ratio of 1:5 and two unidentified carbohydrate bearing material along with protein and ascorbic acid. Polysaccharides which on hydrolysis give D-glucose, D-galactose and D glucoronic acid in a molar ratio of 1:1.9:0.9.

Bennett *et al.* [7] profiled glucosinolate and phenolics in vegetative and reproductive tissue of multipurpose tree *Moringa oleifera*.

Hedau *et al.* [8] studied the effect of *Moringa oleifera* leaves and *Butea frondosa* flower supplementation on cockerels. The result showed higher body weight gain and haematinic effect in treatment group.

Gupta *et al.* [9] worked on immunomodulatory effect of Ethanolic extract of *Moringa oleifera* leaves on normal and immunosuppressed mice model and found that the *Moringa oleifera* treated group shows a significant rise (P<0.05) in phagocytic index, haematological parameter as well as serum enzyme level.

Bukar *et al.* [10] worked on Antimicrobial Profile of *Moringa oleifera* Lam extract and found that the chloroform ethanol extracts posses a sanitizer property due to that they act as antimicrobial agent.

**CONCLUSION**

Aqueous extract and dried powder of *Moringa oleifera* leaf may be recommended as safe and commercially beneficial performance enhancer as is evident from better body weight gain, and better feed conversion ratio (FCR) for higher weight gain per bird at the sale counter fetching more money to farmers.
REFERENCES


