

E-ZINE OF BIOLOGICAL SCIENCES ISSN: 2456-7264 | Issue – 29 | Published On 18/06/2024 Anthill Soil and Its Potential Use in the Livestock Sector



Anthill soil has been used by rural folks, and according to Ayurveda, as a remedy for various ailments in human. It is also used by people as a fertility enhancer in the agricultural field. In this article, we are exploring a scope of using it in livestock husbandry.

Anthill soil, also known as *Valmika Mrittika*, is one of the potent sources of nutrients to uplift the condition of existing land areas and has healing properties when applied on the body along with certain herbs and natural ingredients.

The ants, with their activities in soil, make certain chemical changes in soil, most notably the change of pH towards neutral. If an anthill grows in an acidic land, the adjacent soil of the anthill will have a minimum difference of pH 1 from the surrounding areas. It also enhances the nutrient content of the soil, especially with an increase of Nitrogen and Phosphorus. The organic matters of plant origin, food and dead ants accumulated in the nests get decomposed and contribute to fertilising the soil. The organisms also cause an increase in cations, such as Magnesium, potassium, sulphur.

In addition to nutrient quantity, ants also increase the water storage capacity of the soil. Thus, the anthill soil can be applied in livestock sheds during summer by the poor farmers or backyard farmers as an outer layer of the muddy floor, which can act as a remedy for hot environment and maintenance of moisture in a dry condition.

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In ayurveda and naturopathy therapies, it is used as a paste to treat acne, pain and stiffness of joints and muscles, especially thigh and calf, as well as pain due to insect bite. The anthill soil, the bark, fruit, and roots of Karanja (*Pongamia pinnata*) is prepared as a fine powder mix for dry rubbing in thigh and calf pain. Anthill soil is mixed with juice extract of Bhringaraja (*Eclipta alba*), prepared as paste for using as a remedy for insect bites.

Thus, it has a potential for usage as a natural remedy for cattle and other livestock which get frequently affected by injuries and insect bites. So, the usage of anthill soil with certain natural herbs and plant parts with the necessary scientific validation of their reported medicinal values as per indigenous traditional knowledge, may probably be used as a relief for the poor farmers to take care of their livestock.

In conclusion, we can say that the anthill soil has its own potential and additionally, in a mixture of other natural ingredients, can help the domestic animals, mostly of the tropical climate, to stay more comfortably in a hot environment with abundant moisture. It can also help as a remedy for certain ailments such as muscle pain and certain insect bites. It may help the farmers in minimising their cost in treating the animals. The farmers can also use anthill soil in their agricultural field as a natural fertiliser; thus, reducing the dependence on high-cost inorganic fertilisers found in the market. In a research work reported from Zambia, it has been found that, with the usage of anthill soil, the farmers could grow crops without artificial fertilisers for up to three years. Thus, the anthill soil, if used effectively and properly, may act as a great source of low-cost remedy for maintaining livestock in India.

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