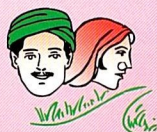


Brief Description of the Technology

Mithun (*Bos frontalis*) is a free-range domesticated hill animal. Traditional supplementation methods, like spreading salt on rocks or palm-feeding, can lead to salt toxicities and are logistically challenging in remote areas.

The ICAR-NRC on Mithun, Medziphema, has developed an area-specific mineral mixture formed into blocks for slow, controlled release by licking. This innovation addresses the difficulties of daily mineral supplementation in remote, perilous areas and overcomes the issue of hygroscopic mineral blocks losing compactness due to rain and high humidity.



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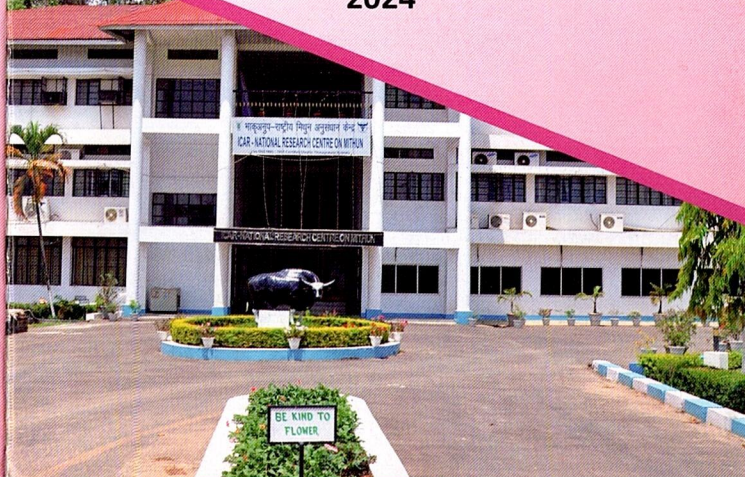
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METHOD OF PREPARING MINERAL BLOCK ADDED WITH ENVIRONMENTAL FRIENDLY MATERIAL



TECHNOLOGY CERTIFIED BY ICAR



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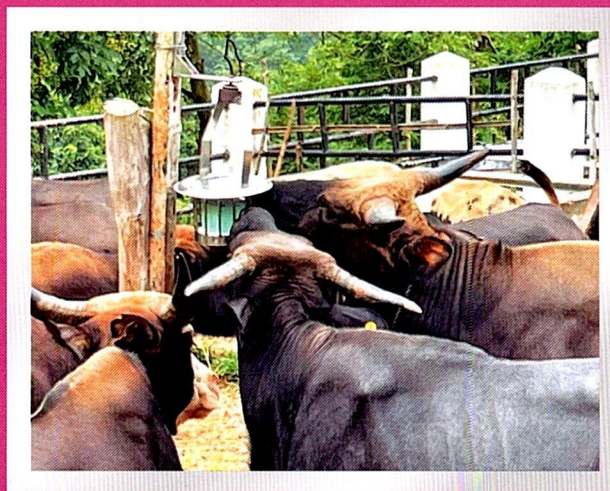


Background

The invention discloses a method for preparing mineral block-lick for animals prepared out of aqueous extract of shrub *Debregeasia orientalis* bark, mineral mixture powder, water and mustard oil. The bark of *Debregeasia orientalis* is macerated, mixed with equal volume of water; kept overnight (12 hours) in room temperature at 25 °C; removed the fibrous material manually and used as an adhesive. The macerated plant-bark extract, mineral mixture powder and water were mixed at a ratio of 0.25 kg, 2kg and 250 ml respectively.

The mixed material is pressed in a small portable feed block machine (500 to 1000 psi) having hydraulic device to give the block a smooth and cylindrical shape. The block is dried in a hot air oven for 4 days and at last painted with mustard oil over the surface of the block. The binding power and functionality of the dedicated environmental friendly adhesive is just right for forming a strong and tough mineral block body.

Prototype



About the technology

The mineral block for Mithun feed is comprised of mineral mixture powder and an organic binding agent from *Debregeasia orientalis* bark. The preparation method involves mixing mineral mixture powder with water-soaked macerated bark extract. The steps include grinding the dried bark, mixing it with water, soaking overnight, preparing the mineral mixture with specific minerals, combining with the soaked bark extract, pressing the mixture, and drying it in a hot air oven. The final product is an oil-painted mineral block that ensures a slow and controlled release of minerals.

Key Benefits:

- **Environmentally Friendly:** Utilizes organic binding agents
- **Strong and Durable:** Forms a tough mineral block body
- **Controlled Mineral Release:** Ensures slow and controlled release by licking
- **Convenient:** Portable and easy to handle
- **Weather Resistant:** Oil painting makes it resistant to humidity and rain