

Brief Description of the Technology

Large animal Ectoparasite Expeller-cum-Drug Applicator is a portable, durable, affordable and farmer friendly implement.

It can be used in wide range of large and small ruminants including equine and swine. Also, useful to ward off exfoliated skin, hair and increase blood circulation of skin. It offers an easy method of topical application of ectoparasitidal drugs with effortless removal of adult ticks & lice that feed on blood and skin tissues from body surface.

The implement can reach to poorly accessible areas like dewlap, brisket, sheet, perineal regions, inner aspect of fore and hind limbs and udder.

Technology commercialized to:

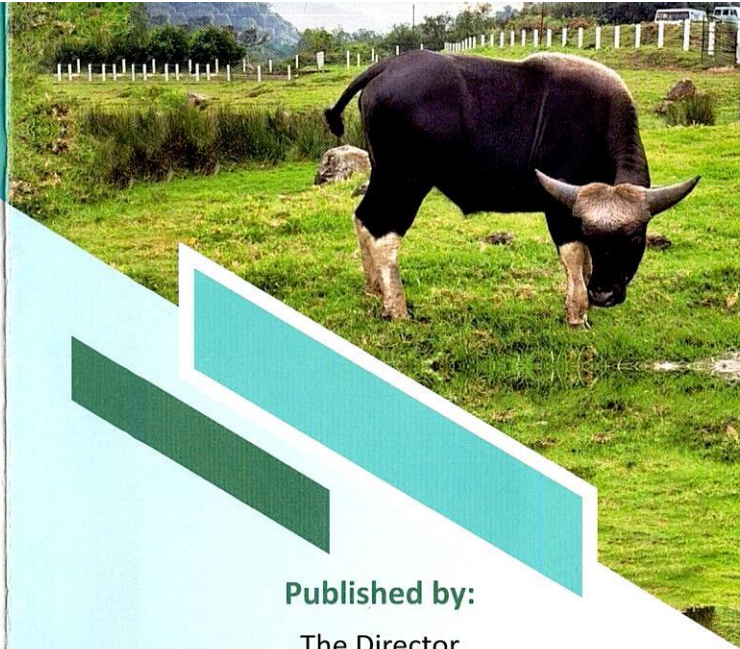
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LARGE ANIMAL ECTOPARASITE EXPELLER CUM DRUG APPLICATOR



Design Registration Number-335631-001

Commercialized technology
TECHNOLOGY CERTIFIED BY ICAR



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Background

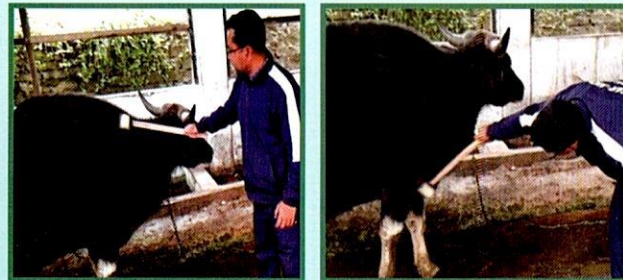
Mithun, cattle, horse, sheep, goat and pig are affected by wide range of arthropod ectoparasite and nuisance pests. Ectoparasites causes significant losses and severely compromises animal welfare. Tick, mite, lice, flies, leech etc. inhabit the hair, surface and outer layers of skin and feed on host tissue, blood and associated secretions. Ectoparasite invokes inflammatory response with intense itching and pain.

Clinical manifestation Inflamed skin and discharges, hair loss, self inflict trauma, anemia and death in severe cases.

One Health importance Invasive and of high socioeconomic consequence and several zoonotic ectoparasite-borne pathogens can affect public health.

- Most of the instances not attended to the problem with self cure at a cost of animal health and production. However, recurrence occur with the continuity of the life cycle of the ectoparasite
- Hand picking of the adult parasites and crushing particularly ticks and lice
- Application of saline water to ward off leech as temporary control measure

Prototype



About the Technology

The product works on the principle that application of commercial spot-on topical products/drugs that will paralyse and loosens their grip of the ectoparasite on the skin. The associated comb aid in mechanical removal the adult populations.

Key benefits:

- Portable structure, durable, affordable and farmer friendly
- Applicable in wide range of large and small ruminants including equine and swine
- Ward off exfoliated skin, hair and increase blood circulation of skin
- Easy method of topical application of ectoparasicidal drugs like permethrin, cypermethrin etc.
- Easy removal of adult ticks & lice that feed on blood and skin tissues from body surface
- Effortless removal of adult ticks, lice and leech in poorly accessible areas like dewlap, brisket, sheet, perineal regions, inner aspect of fore and hind limbs and udder