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COMPARATIVE THERAPEUTIC EVALUATION OF NEEM (AZADIRACHTA INDICA) LEAF PASTE AND IVERMECTIN FOR THE MANAGEMENT OF CAPRINE SKIN LESIONS IN MUKTAGACHA UPAZILA, MYMENSINGH

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ABSTRACT

Caprine skin lesions related to ectoparasitic disease are a common practical problem in smallholder goat production. They may cause irritation, hair loss, crusting and poor skin condition and may reduce the economic value of the affected animals. Ivermectin is a well-known anti-parasite drug whereas neem (Azadirachta indica) is a locally available traditional drug for skin problems. This field study was carried out to compare the clinical healing response of neem leaf paste and ivermectin in naturally occurred skin lesions of goats of Muktagacha Upazila, Mymensingh. Seven local-breed goats aged 1–2 years were included and treated with freshly prepared neem leaf paste once daily for 14 days (3 goats), 1% ivermectin subcutaneously at 200 µg kg body weight on Days 0 and 7 (3 goats), and one goat was used as a reference (untreated). Lesions were evaluated on Days 0, 7, 14, 21 and 28. Ivermectin led to a quicker improvement in the first three weeks. The lesion reduction was 50%, 75% and 95% on days 7, 14 and 21 respectively as compared to 30%, 55% and 80% in neem group. By day 28 the respective reductions were 100% and 98% and the difference was no longer statistically significant (p=0.06). The untreated goat showed spontaneous improvement of about 30 per cent. No adverse effects were seen. In this small field study, ivermectin produced faster clinical improvement, while neem leaf paste showed significant healing over time. Neem may thus have practical value as a low-cost topical choice for mild or localized skin lesions but larger controlled studies are needed before recommending it as a substitute for established antiparasitic therapy.