
Tick Control For Goats

Eliazar Rose, New Hope Leprosy Trust, India. "I am writing in reference to the article on using tobacco to treat goats and cattle for ticks and lice (EDN 56). Our experience is that a mixture of 100 grams of dried tobacco leaves, 10 ml neem oil, and 10 grams of salt plus a teaspoon of soap powder was very, very effective and had no side effects. We believe that it is essential to spray/wipe only in the evening and/or under shade. "

"We also spray a neem/soap solution on the area where goats rest—to reduce re-infection etc."

Charlie Forst (Kenya) visited ECHO recently. "I read in EDN about Fern Yocum's nicotine treatment for killing ticks on goats. Why not use a tea made from castor leaves? They are effective and commonly available in the tropics." Charlie also brought with him a copy of a new book published by FARMAfrica and Oxfam about which he was enthusiastic. Improving Goat Production in the Tropics: a manual for development workers (400 pages, 1996) was written for development workers who may or may not have formal training in livestock production. It explains the "underlying theory of goat production and how this can be used to design simple improvements... together with suggestions for how they might be implemented in development programs." A student at ECHO also reviewed the book and was impressed by its up-to-date information, its extensive sections on diagnosing common diseases (and home treatments when available), and its usefulness for development workers. For example, in the chapter on goat health, a section is devoted to the training of "paravets" (local villagers in areas without veterinarians trained to help neighbors with animal health). In the chapter on breeds and breed improvement, a section is devoted to "practical methods of breed improvement for groups and governments." An entire chapter is devoted to goat improvement programs, as well.

In the chapter on goat health, we find Charlie's treatment for ticks and mange mites:

"The castor bean plant (*Ricinus communis*) is a very common perennial, growing in a very wide range of environments in the tropics. It contains an insecticidal chemical, ricin, in the leaves and stems. Being water-soluble, ricin can be extracted from the leaves and stems, using a simple water-extraction process. A quantity of chopped leaves and stems should be added to 50 times its weight in water. The mixture should be heated to just below boiling point. The residue should be pressed to extract the liquid. The liquid can be used to wash goats, but be careful: **ricin is very poisonous**. [editor's note: the bold type is original. We fully agree. Ricin is one of the most toxic substances to both humans and goats. Wear rubber gloves, if available, when using this infusion.] Under no circumstances should it be

consumed. Great care must be taken in handling this chemical. Children should be carefully supervised during the extraction process and during its use. Washing with all chemicals should be done away from the home and water supplies for humans.

The goat should be thoroughly washed. It must be remembered that the mange mites are buried deep within the skin, so it must be rubbed very hard for the chemical to come into contact with the mites. Pinpricks of blood will be seen if the washing is done properly. If the case is very severe, wash every 2-3 days until signs of improvements can be seen.

If it is not so severe... every 5-6 days. It can be helpful to wash the skin with soap and water before using the chemical, as this softens up the skin and helps the chemical to penetrate it."