Preference of dairy cows in the consumption of woody forage in Rivas, Nicaragua

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Abstract

In dry areas of Central America woody plants are an alternative forage for cattle feed. It was conducted a study in a dry zone of Nicaragua its objective was to evaluate the preference in foliage consumption of ten common woody species in pastures and traits that favor greater acceptance by livestock. The preference was determined by cafeteria testing in pairs of woody using five cows. The combination of ten species in pairs originated a total of 45 events for each cow, each lasted three minutes. The descending order of consumption was *Samanea saman, Leucaena leucocephala, Albizia niopoides, Cordia dentata, Moringa oleifera, Guazuma ulmifolia, Gliricidia sepium, Brosimum alicastrum, Mimosa pigra y Acacia farnesiana*. The first three species are legumes that have higher nitrogen content, leaves large and soft; although the latter two are legumes of low preference is due to the presence of thorns and high concentration of condensed tannins. Many forages species present condensed tannins that can poison livestock by high consumption. This usually occurs when cattle have this food only diet and it is difficult to happen in pasture where there is a variety of forages. Preference studies give us guidance on the preferred livestock species, although silvopastoral system designs must consider other attributes such as ease of propagation woody, resprouting capacity, forage yield, tolerant frequent pruning, and are multipurpose. Therefore species like *Leucaena leucocephala, Cordia dentata, Gliricidia sepium,* and *Guazuma ulmifolia* have important advantages as on-farm feed resources.