



Economic Impact of Toxic Plants on Livestock Production in Sonora, Mexico

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In almost all vegetation types, there are species that can cause toxicity to livestock. Animal poisoning causes many different problems and can affect reproduction, weight gains, and even death. These problems are causing economic losses in the livestock industry and although it is necessary to quantify, it is very difficult to achieve it. Sonora has been diagnosed with severe overgrazing problems which have caused an increase in the density and cover of undesirable species and toxic plants. We have identified 184 toxic species, 59 of which are consumed by livestock and cause problems in rangelands. This study was conducted in the state of Sonora, Mexico to estimate the economic impact of toxic plants on livestock productivity. We used various sources of information, including official statistics records of cattle numbers, sales and cattle deaths related to toxic plants, to develop analysis and calculations that may come closer to quantifying these economic effects. The methodology described by Nielsen et al. (1990) was used to estimate these losses. The results show that a conservative estimate of the economic effect of these plants on Sonora livestock may represent a loss of approximately 90 million pesos a year. This is equivalent to loss about \$115 pesos annually per cow. We conclude that the cost of toxic plants in rangelands is high; consequently control measure practices have to be applied to reduce plant densities and cattle losses to increase ranch productivity.

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