



Tropentag, September 17-19, 2014, Prague, Czech Republic

“Bridging the gap between increasing knowledge and decreasing resources”

Eradication of the Introduced and Potentially Invasive Species of *Calotropis procera* from Socotra

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Abstract

Calotropis procera, a shrub native in northern Africa and western and southern Asia, was introduced to Socotra for more than a century ago and is one of 87 non-native species of the local flora. Although in some places of the planet the species has an invasive character, on Socotra it is not considered as dangerous. Especially in the north of the island near the capital Hadibo it is however abundantly represented in home gardens and could have an impact on the local vegetation. Therefore, it was decided to develop a proposal for its eradication.

During the field investigation, it has been found that as long as the vegetation of the island is under intensive pressure of livestock, especially goats, *Calotropis procera* will not have an invasive character outside fenced gardens. After rainfall in areas with adult fruiting trees, a large number of seedlings germinate, but they are rapidly disappearing under the pressure of grazing. Although the species is considered as not very suitable for grazing, on Socotra in the vicinity of larger towns where there is such enormous pressure on food sources, animals feed on seedlings and achievable leaves of *Calotropis procera*.

Mature individuals from the wild would be appropriately reduced mechanically using common tools, mainly by cutting them because potential shoots would be rapidly be eliminated by grazing. Another way is the ringing of the tree, i.e. mechanical interruption of the phloem, which leads to exhausting and finally the dead of the tree naturally. To eradicate the species in home gardens, workshops and trainings of local people would be the first step. They will be informed about nature conservation and possibilities of removal of *Calotropis* trees, while motivation for such activities would be e.g. offering other useful species of native trees for cultivation.

Keywords: *Calotropis procera*, eradication, invasive species