

## Invasive Plant Species Found in Madagascar

Invasive plant species are species of plants which are not native to a specific location. These plants can be spread in many ways for example in migrating birds, powerful winds or introduced by humans. When these invasive spread they can cause detrimental effects on delicate biodiverse habitats as they have few enemies or natural predators. This allows them to spread with little or no control. This prevents native plant species from surviving as they are often out competed for nutrients and light needed for photosynthesis.

### Desmodium (*Desmodium uncinatum*)

This invasive plant species is a large perennial legume with stems that can grow several meters long. Each stem is covered with short hooked hairs that trap small animals. This plant is native to South America and is used for grazing livestock.



### Strawberry Guava (*Psidium cattleianum*)

This invasive plant species is destructive and can spread rapidly causing a major threat to flora by out competing native species for light and soil nutrients. This plant is native to South-eastern Brazil and the fruit it produces can be eaten.



### Rubus (*Rubus moluccanus*)

This invasive plant is a climbing shrub that can grow up to 3 meters in height. The stems and leaves are covered in medium sized spines. These plants grow quickly, strangling and out competing native plants for light and nutrients. This plant is native to Australia.



### Lantana (*Lantana camara*)

This invasive plant grows rapidly out competing native species and can grow up to 2.5 meters tall and each stem has small curved thorns. This plant has an extensive root system and can re-grow from cuttings, making it difficult to remove. This plant is used as herbal medicine and is established in over 60 different countries.



### Reforestation

In Andasibe we collected data on vegetation structure in areas of managed and unmanaged forest. This allowed us to see the effects of invasive plant species on parts of the forest and compare the different findings from the managed and unmanaged areas of restoration. We did this by marking the quadrats using string and a compass. The location of the quadrat was noted using a GPS tracker so that it could be located again in the future. In each quadrat, we calculated vegetation volumes and percentages of invasive plant species.

We found that in managed restored areas there was an increase in sapling survival rate compared to unmanaged areas with increased invasive plant species numbers. The Reforestation Project has small nurseries where they grow endemic and native plant species to give them a head start against invasive species to help restore areas of forest.

