

## The sensitivity comparison of the mongoose detection tools in mopping-up stage of eradication campaign in Amami-Oshima island

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The small Indian mongoose (*Herpestes auropunctatus*) is one of the worst invasive alien species because of affecting negative impacts on ecosystems where they were introduced. In Amami- Oshima Island, the mongooses were introduced in 1979, and it has also been causing damages on native species of the island. During 2005-2014, eradication campaign against the mongoose has been enforcing by the Japanese government as a model for conservation. The aim of the campaign in Amami-Oshima Island is to eradicate the mongoose from the whole island. The campaign has been succeeding to decrease the population of the mongoose. To achieve the aim, we need the effective method to detect a mongoose to develop capture strategy. In the campaign, following 4 methods, sensor cameras, dogs, hair traps and capturing traps, are used to detect a mongoose. In this study, we try to compare these methods in low-density area after intensive trappings and discuss effective detect method. This study is supported by the grants from the 2009-2011 Biodiversity technology development funds by the Ministry of the Environment Japan.

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