First trial to measure the feeding efficiency of medium-sized mammals in fruit dump sites: a case of strawberry fruits.

Chinatsu Kozakai*[1], Ayaka Hata*[1], Midori Saeki*[1], Masahiko Takeuchi*[1]

Summary

It is important to know the value of discarded fruit as food resources in medium-sized mammals, including invasive species in Japan, such as raccoon (*Procyon lotor*) and masked palm civet (*Paguma larvata*) for effective controls of crop damage and animal population. We investigated foraging efficiency of medium-sized mammals in fruit, strawberry, dump sites using remote cameras. Then we calculated how long did the animals need for obtaining daily energy requirement (DE) in the dump sites. The feeding rates (median value) were 6.0 fruit/min for civets and 3.8 fruit/min for racoons. The necessary times for obtaining DE were 13 minutes for civets and 95 minutes for raccoons, equivalent to 1.8% and 13.2% of daily activity time for civets and raccoons, respectively, in their original forest habitats. Based on such a high foraging efficiency, it would be important to take proper measures to avoid use of dump sites by these animals for controlling crop damage and their population.

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*[1] Central Region Agricultural Research Center, NARO