24th FEFCO

Forest Ecosystem Function Colloquium (FEFCO)は、地域や地球全体のレベルで森林生態系の機能とその持続的活用法を統合的に理解することを目的とし、研究者間の学術交流を推進します。

第24回森林生態系機能コロキウムは、マダガスカルAntananarivo大学よりHajanirina RAKOTOMANANA先生にご講演いただきます。どなたでも参加できますので、多くの皆様のご参加をお待ちしております。京都大学農学研究科森林・人間関係学研究室がホストを務めます。

24th FEFCO

2015/6/26 10:30 - 12:00

Faculty of Agriculture Main Building, S130

Hajanirina RAKOTOMANANA
(Department of Animal Biology, Faculty of Science,
University of Antananarivo, Madagascar)

Avian seed dispersal in the Madagascar' rain forest with special respect to Velvet Asity Philepitta castanea

In Madagascar, frugivorous bird species are fewer and their seed dispersal is far less efficient than in other tropical countries. The efficiency of the endemic frugivorous bird, Velvet Asity Philepitta castanea, at dispersing seeds was studied on the basis of data from movement patterns (using continuous recording method) and estimated shadow produced by birds in Ranomafana, Southeastern Madagascar, throughout the dry season. Seed dispersal distance was estimated from the data on gut passage rates and movement patterns. Small ripe and unripe fruits (< 10mm in diameter) in the families of Rubiaceae, Myrsinaceae and Oleaceae were consumed by the Velvet Asity, and seeds were either regurgitated or defecated away from the parent plants. Effective dispersal distance was 33.3 m/h. Based on seed retention time in captivity, more than 85.7% of regurgitated seeds and all defecated seeds were estimated to be transported outside the crowns of mother plants but they were dispersed to much shorter distances than those carried by lemurs and bats. To conclude, the role of lemurs may be even more crucial because of the island's relatively depauperate frugivorous birds and bats.

Keywords: defecation, Madagascar, regurgitation, seed dispersal, seed shadow.

Forest Ecosystem Function Colloquium
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