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DOI: 10.1002/ecy.4165

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Document Version Publisher's PDF, also known as Version of record

Citation for published version (Harvard):

Vaessen, RW, van Wijngaarden, K, Boeschoten, L, Knippers, R, Durazzo, L, Verkuil, L & van Kuijk, M 2023, 'Fruit and seed traits and vertebrate–fruit interactions of tree species occurring in Guyana, Suriname, and French Guiana', *Ecology*. https://doi.org/10.1002/ecy.4165

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Revised: 11 June 2023

DOI: 10.1002/ecy.4165

#### DATA PAPER



# Fruit and seed traits and vertebrate–fruit interactions of tree species occurring in Guyana, Suriname, and French Guiana

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Handling Editor: William K. Michener

# Abstract

Seed dispersal is widely considered an important mechanism for the conservation of plant diversity. In tropical regions, over 80% of woody plant species are dispersed by vertebrates, often through the consumption of fruits. Our understanding of what drives interactions between vertebrates and fruits is limited. Through a systematic literature search, we compiled a database of fruit and seed traits and vertebrate-fruit interactions for tree and vertebrate species occurring in the Guianas, with the aim of facilitating research into seed dispersal and seed predation of tree species in the Guianas. The database was compiled by extracting data from 264 published sources. It consists of 21,082 records, of which 19,039 records contain information about 19 different fruit and seed traits belonging to 1622 different tree species. The other 2043 records contain information on vertebrate-fruit interactions between 161 vertebrate species and 464 tree species. Our analyses showed a taxonomic bias, particularly in the interaction data, toward large-bodied vertebrates, with most interactions recorded for the bearded saki (Chiropotes chiropotes), followed by the lowland tapir (Tapirus terrestris). For plants we found an overrepresentation of the Sapotaceae and Moraceae families and an underrepresentation of the Rubiaceae, Myrtaceae, and Lauraceae families in the interactions. There are no copyright restrictions on the data set; please cite this publication when using these data.

#### **KEYWORDS**

French Guiana, frugivory, fruit traits, Guianas, Guyana, seed dispersal, seed predation, seed traits, Suriname

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# CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

# DATA AVAILABILITY STATEMENT

The complete data set is available as Supporting Information. Data are also available in DataverseNL at https://doi.org/10.34894/3X8JWB.

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# SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article. How to cite this article: Vaessen, Rens W., Klaske van Wijngaarden, Laura Boeschoten, Ronja Knippers, Livia Durazzo, Loes Verkuil, and Marijke van Kuijk. 2023. "Fruit and Seed Traits and Vertebrate–Fruit Interactions of Tree Species Occurring in Guyana, Suriname, and French Guiana." *Ecology* e4165. <u>https://doi.org/10.1002/</u> ecy.4165