Article eco-acoustique

Acoustic pollinator detection to measure the pollination activity

Abstract

Introduction

Service pol essential

Nécessité de le mesurer

Découle de l’activité des pol

We compared different methods of automatic acoustic detection to show the best method to detect automatically pollinators during their flying in limiting the error rate.

Material & Methods

Site description

Sampling method

In each field, we placed an audiomoth, which is a microphone (see …. For the description and parameters), between 10 to 20cm in front of a sunflower plant situated at approximately 20m of the ….. The audiomoth were covered by a “bonnette” to reduce the sound of wind. We made recordings between 6 am to 10 pm.

Recordings treatment

Fichiers découpés en 10 sec et accélérés 10 fois

A reference database building

12 focales étiquetées dès qu’on savait à quoi correspondait l’évènement sonore

Grâce à première base de ref, classifier a tourné sur 10% données hors focales et sélection aléatoire stratifiée pour augmenter data base

Classifier testings

Results

Discussion