Chocolate is among resources highly required worldwide and the chocolate market heavily depends on the production of cocoa, about 70% of which is cultivated in Africa. In Cameroon, previous studies integrating community field data and DNA metabarcoding provides proof that 12 species of birds (*Alethe castanea, Bleda notatus, Elminia longicauda, Camaroptera brachyura, Ispidina lecontei, Hylia prasina, Phyllastrephus sp., Criniger sp., Diaphorophyia castanea, Ispidina picta, Muscicapa comitata, Terpsiphone sp., Rhinolophus alcyone, Hipposideros ruber, Hipposideros cyclops, Nycteris sp., Nycteris grandis* and *Hypposideros sp.*) consume different cocoa pests, including considerable numbers of Brown Capsids (*Sahlbergella singularis*), the most destructive cocoa pest on Earth (Babin *et a*l., 2010).

It is obvious that birds provide substantial benefit for crop production through their ecosystem services and can be used for pest's biological control in cocoa farms. However, over 68% of bird species are susceptible to haemosporidian parasites (*Haemoproteus, Plasmodium* and *Leucocytozoon spp.*) known to reduce the fitness of the hosts and in some cases lead to death (Cannell e*t al.*, 2013; Paxton et al., 2016). Recent histopathology findings showed that haemoproteids can cause severe and even lethal avian diseases due to damage of various internal organs by exo-erythrocytic stages (Duc et al., 2021; Himmel et al., 2021). Their effect on bird eating pests in Cameroonian cocoa farms remains unknown. Better understanding the pathogenesis of avian haemosporidiosis in insectivorous birds might ultimately contribute to improvement of health and wildlife conservation policies.

The main objective of this project is to assess the pathogenicity of haemosporidian parasites in insectivorous pest-eating birds in Cameroonian cocoa farms. Specifically, we will determine 1) prevalence and intensity of haemosporidian parasites in the targeted species, 2) seasonal variation in parasite prevalence and intensity, and 3) risk factors associated to parasite prevalence.

Adapted from 2022 awardee Mélanie Adèle Tchoumbou's project: https://www.conservationactionresearch.net/projects/which-native-shade-trees-will-attract-pest-eating-birds-to-cameroonian-cocoa-farms