Darwin’s finches are highly adaptable and able to cope with the unpredictable characteristics of the Galapagos Archipelago, yet they are severely threatened by invasive parasites. In 2012 for the first time a warbler finch, was observed rubbing the feathers with leaves of the endemic tree *Psidium galapageum*, possibly to repel ectoparasites. Blood-sucking flies, mosquitoes and mosquito-borne pathogens such as avian pox are increasingly affecting the survival of Darwin’s finches. The repellent effect of *P. galapageum* might be an option for the successful reduction of parasites attacking the birds as its essential oil contains several volatile components with repellent effects on different arthropods. Thus, extracts of *P. galapageum* might provide an excellent, environmentally sustainable and biocompatible alternative for parasite repellence in a very delicate environment. The joint project will investigate the self-medication of the birds and identify the best mosquito-repellent components and their applicability as an “endemic” repellent in this sensitive area.