Start of the Interdisciplinary Research Network of the Faculty of Life Science

"Self medication in Darwin's finches: identifying the mosquito repellent components of Psidium galapageum" by S. Tebbich (Dept. of Behavioural Biology) and L. Krenn (Dept. of Pharmacognosy)



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.