Master thesis project

Indirect effect of artificial light at night on diurnal plant-pollinator communities

Light pollution is rapidly increasing around the globe. In our group, we have shown that it can disrupt plant-pollinator interactions at night with negative consequences for plant reproductive output (Knop et al. 2017). Recently, we have shown that it indirectly also alter plant-pollinator interactions during daytime (Giavi et al. 2021). We now offer three MSc projects that focus on disentangling the underlying mechanisms driving the change of diurnal plant-pollinator interactions due to artificial light at night.

All projects will be part of a larger project that involves a PhD student and several field assistants. Two projects will involve field work outside Zürich. One project will be based on the Agroscope campus and conducted mostly in the greenhouse and garden.

The results of the MSc-project are expected to be published in a peer-reviewed scientific journal. You should have a strong interest in global change ecology, be interested in doing field work, and working in a team. Also, you should have basic knowledge in statistics (R) and ideally own a driver's license (but it is not mandatory).

You should begin with your work at latest in April/May 2022. For application or additional information, please contact Vincent Grognuz (vincent.grognuz@agroscope.admin.ch) or PD Dr. Eva Knop (eva.knop@ieu.uzh.ch), www.knoplab.ch.

Knop E., Zoller L., Ryser R., Gerpe C., Fontaine C. (2017) Artificial light as a new threat to pollination. Nature 548: 206-209.

Giavi S., Fontaine C., Knop E. (2021) Impact of artificial light at night on diurnal plant-pollinator interactions. Nature Communications. 12:1690. doi.org/10.1038/s41467-021-22011-8.