

Ph.D. fellow "The effect of global change on host-parasite interactions and coevolution of the deepsnouted pipefish (*Syngnathus typhle*) and its parasite (*Cryptocotyle lingua*)"

Initiative: Evolutionsbiologie (beendet)

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Laufzeit: 3 Jahre

Recent climate change affects many natural and human systems. In the light of global change it will be investigated how environmental variation alters the specific interaction of host and parasite genotypes (G x G x E interactions) and how it influences their coevolution. Extensive field sampling, modern molecular techniques and laboratory experiments will be combined to determine the relationship and divergence of the European pipefish-trematode system and to show selection pressure in a changing world. The interactions of host, parasite and environment will be deciphered by studying the host-parasite arms race in simulated environmental variation with either temperature changes or a heat wave as extreme patterns of climate change. It is expected on the one hand to gain insights in how specific genetic interactions will be altered by a changing environment and on the other hand to conclude how the host-parasite coevolution in Europe will be affected by global change.

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