Effects of pesticides on soil fauna: Development of ecotoxicological test methods for tropical regions

The impact of pesticides on the soil system is an issue of great concern. In the tropics, the environmental risk of pesticides is assessed using methods designed for temperate regions. This pioneer study shows that the toxicity of pesticides (here: two fungicides and an insecticide) measured under tropical conditions, e.g., higher temperature and different test species, can differ greatly from that determined for temperate conditions. Thus, a risk assessment of pesticides for tropical ecosystems based on existing toxicological data from temperate regions alone is not considered sufficient. Additional, adapted tests must be developed for tropical conditions.