

## عنوان مقاله:

Effects of pesticides and heavy metals on fish

# محل انتشار:

ششمین کنگره بین المللی تحقیقات شیلات و آبزیان (سال: 1401)

تعداد صفحات اصل مقاله: 2

# نویسندگان:

M Bashiri - Department of Clinical Science, Faculty of Veterinary Medicine, Tehran University, Tehran, Iran

H Momeni - Department of Clinical Science, Faculty of Veterinary Medicine, Shahid Chamran university of Ahvaz, Ahvaz, Iran

### خلاصه مقاله:

Humans discharge a wide range of organic and inorganic toxins into the environment, including plastics, medicines, pesticides, and metals. These pollutants have a variety of effects on both aquatic and terrestrial species. According to ecotoxicology studies, contaminants have a direct influence on the physiology of animals and raise the mortality rate. However, there has been little study on the behavioural consequences of multistress circumstances, such as environmental pollutants, on wild animals. Contaminants from agricultural operations, industrial resources, abandoned military facilities, and urban areas are discharged directly or indirectly into bodies of water, putting aquatic ecosystems at danger. Furthermore, as a result of climate change, abiotic elements like temperature and precipitation are changing, which may impact the functioning of species in freshwater ecosystems such as reproduction and eating. We can thereby safeguard worldwide aquatic species by identifying the major pollution activities, their origins, and their destiny in freshwater ecosystems. Heavy metals are significant contaminants that enter the body immediately and are progressively processed and removed by organisms. The principal heavy metal ions emitted from industrial sources and water pollutants are lead (Pb), chromium (Cr), zinc (Zn), and mercury (Hg). Numerous metalloids and heavy metals have been discharged into the environment globally as a consequence of increased human activities. These heavy metals and metalloids infiltrate rivers and lakes after being released into the environment. Some metals, like nickel (Ni), chromium (Cr), copper (Cu), and zinc (Zn), are harmful in large amounts, but they are needed at low levels for organisms to grow and work properly. Lead (Pb), arsenic (As), cadmium (Cd), and mercury (Hg), on the other hand, are all very poisonous even at low amounts and are non-essential to life. To get a full picture of heavy metal contamination within an ecosystem, which also poses a hazard to human health, it is necessary to collect sediment and water samples, as well as assess the magnitude of bioaccumulation in ingested fish species. The concentration of heavy metals is found to be higher in sediments as compared to other water levels. These pollutants cause various diseases in fish, and if humans regularly consume the fish, then serious health problems can result, including cardiovascular damage, cancers, damage related to the nervous system, various lung diseases, kidney and ... gastrointestinal problems, or even death. The risk is greater than ever, a

**کلمات کلیدی:**Heavy metals, Pesticide, Toxins, Environment

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/1772132

