

High Yield Hints – Biological magnification

It is the process where by certain substances such as pesticides or heavy metals move up the food chain, toxins build up a successive link of the food chain. It works their way into river or lakes and are eaten by aquatic organisms such as fish which in turn are eaten by large birds, animals or humans. The substance become concentrated in the chain. It is like a magnifying glass that makes things look bigger. Biological magnification makes toxin get bigger and stronger in the ecosystem.

Eg. 1 Some pesticides are considered as **Environmental Oestrogens**. These chemicals interfere with sex hormones and causes decreases sperm counting, breast cancer, testicular cancer, mis carriage etc. Methoxychlor, Atrazine, Benomyl are examples.

Eg. 2 Beetals may have very low level of fat soluble pesticides, but the pesticides will build much greater levels till in a human that eats the beetal eating bird.

Eg. 3 DDT in food chain of coastal water of long island