TOP 10 REASONS TO NOT USE PESTICIDES AND FERTILIZERS

IN YOUR LANDSCAPING PRACTICES

CORAL REEF DECLINES

Nutrient and chemical pollution are among the main proposed reasons for coral reef declines, due to chemical bioaccumulation and inhibited photosynthesis and calcification. [y]





CAUSES STRESS AND DECREASES RESILIENCE

Pesticides put stress on coral reefs, making them less resilient to rising ocean temperatures and ocean acidification. [y]

MINIMAL AMOUNTS OF PESTICIDES REACH THEIR TARGET PESTS

"Less than 0.1% of pesticides applied for pest control reach their target pests." [s] Therefore, greater than 99.9% of pesticides make their way into the environment affecting other plants, wildlife, and human health.



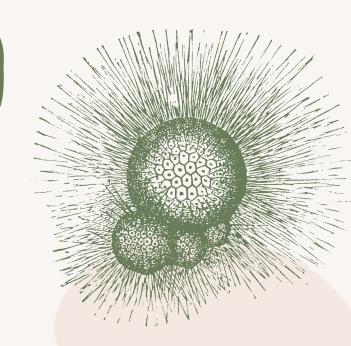
NEGATIVE HEALTH EFFECTS ON FISH AND CORALS

Pesticides and fungicides can cause endocrine disruption, reproductive effects, neurotoxicity, birth defects, a reduction in coral settlement, coral bleaching, and an increased risk of disease in fish.

[i; o; a; e; m; f; q; b]

DECREASES PHYTOPLANKTON BIOMASS

Herbicides such as Atrazine and Glyphosate can cause a decrease in phytoplankton (the base of the food chain) biomass and a decrease in oxygen production. [v]





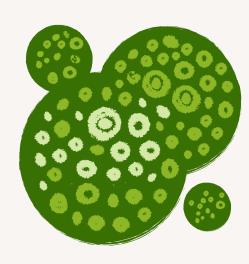
TOP 10 REASONS TO NOT USE PESTICIDES AND FERTILIZERS

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MANY PESTICIDES ARE ENDOCRINE DISRUPTORS

Endocrine disruptors interfere with natural hormones and can affect embryonic, reproductive and sexual development in humans and wildlife. They can also impact sex ratios in crustaceans. [p]





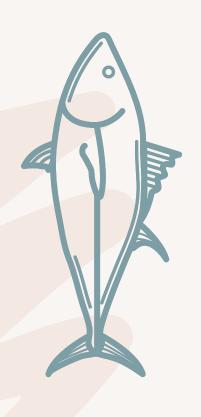
WATER SOLUBLE FERTILIZERS CAN CAUSE EUTROPHICATION

Synthetic water soluble fertilizers are not absorbed by the soil and instead get washed away and end up in our oceans, causing eutrophication, fish die offs, decreases in oxygen, and algal blooms.

[n; aa]

EXCESS NITROGEN SUPPORTS NON-NATIVE ALGAE

Excess nitrogen (which can come from synthetic, water soluble fertilizers) leads to growth of non-native algae. Honu (sea turtles) eat this algae and develop fibropapillomatosis (tumors). [z]



PESTICIDE COMPOUNDS CAN' BIOACCUMULATE IN FISH TISSUE

Pesticide compounds can be stored and accumulated in edible fatty tissues of fish which we eat. Human health effects linked to these pesticides include cancer, Parkinson's Disease, brain development issues in children, neurotoxicity, and other harmful health effects.

[h; m; i; c; u; a; r; l; t; j]

HAWAI'I'S CORAL REEFS ARE VALUED AT \$10 BILLION

"Hawai'i's nearshore reefs generate about \$800 million gross in revenues." [k] Benefits of Hawai'i's coral reefs include: coastal buffering to wave action, a major source of food and resources, tourism and recreation, Hawaiian cultural preservation, and habitat

for marine organisms.





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