

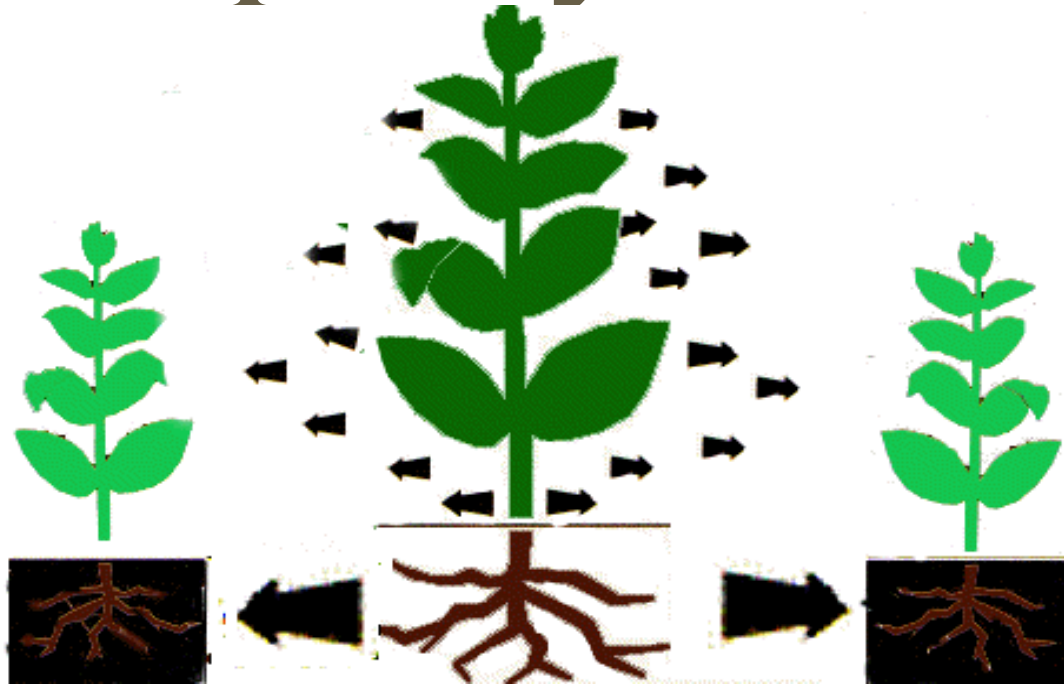
BENEFITS OF SOME AQUATIC PLANTS!

BY LINDA BYSTRAK

SECRETE CHEMICALS FOR
BIOCONTROL ?



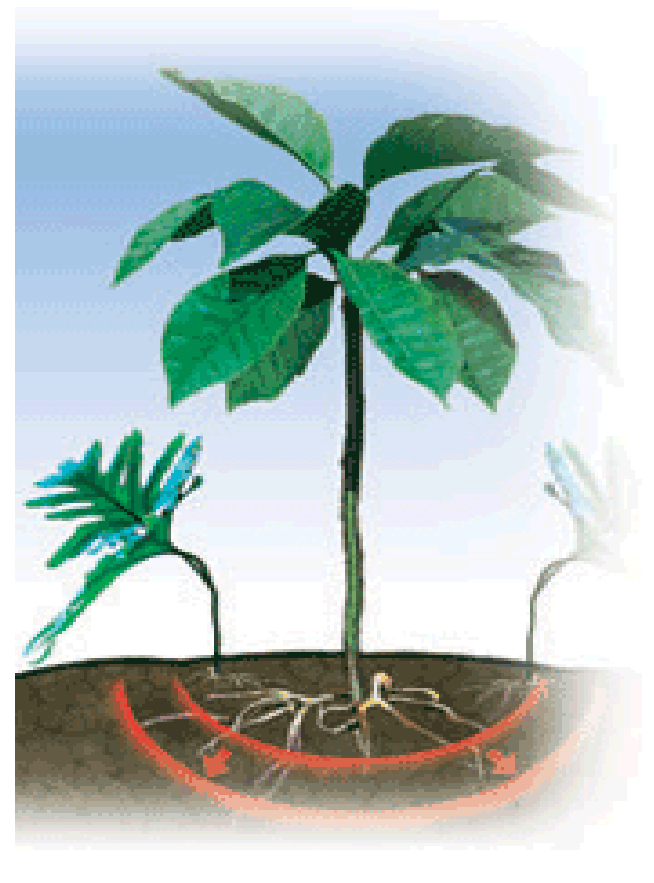
Allelopathy



Chemical inhibition of one species by another

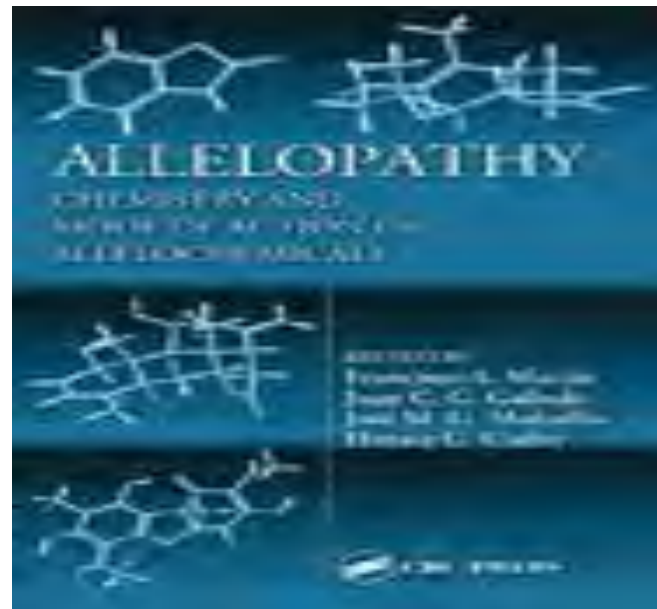
Target species are affected by toxins in different ways

- may inhibit shoot/root growth
- may inhibit nutrient uptake
- may inhibit germination
- May block essential metabolic processes



Allelopathic chemicals

- can be present in any part of the plant - leaves, flowers, roots, fruits, or stems
- are released into the environment where they affect the development and growth of neighboring plants



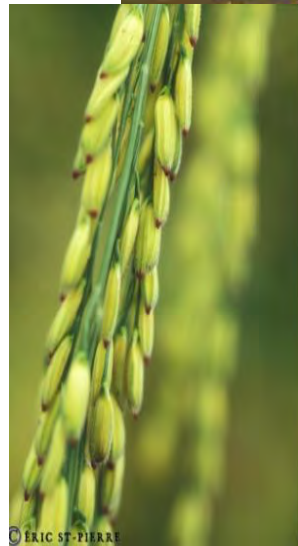
Most famous allelopathic plant: Black Walnut (*Juglans nigra*)

- chemical responsible for the toxicity is Juglone, a respiration inhibitor
- tomato, pepper, and eggplant, are especially susceptible
- symptoms such as wilting, yellowing, and eventually death.



Other Allelopathic Plants

- Sugar maple
- Eucalyptus
- Juniper
- Sycamore
- Oaks
- Forsythia
- Peas
- Tobacco
- Rice



SECRETE CHEMICALS FOR
BIOCONTROL OF HARMFUL
BLUEGREEN ALGAE ?



PENICILLUM FUNGUS PROHIBITS BACTERIAL GROWTH



In Kirby-Bauer testing, white wafers containing antibiotics are placed on a plate of bacteria. Circles of poor bacterial growth surround some wafers indicating susceptibility to the antibiotic.

CAUTION

Intense blooms of potentially toxic bluegreen algae (cyanobacteria) have frequently occurred around this dock and boat ramp. The blooms are of greatest concern when surface scums (a visible layer of floating algae) appear.

Please use caution and consider avoiding swimming or wading and keep pets out of the water when a surface scum is present.

Contact your physician if skin irritations or other health concerns result from contact with the water during a bloom

For more information contact the
Harmful Algal Bloom Hotline 1-888-232-8635