



## Is fertilizer management right for me?

**On an island, any use of fertilizer can make a big impact.**

In areas of dense populations, even slight surplus fertilizer can rapidly accumulate and has been traced to be a big source of excess coastal nutrients and water quality damage.

**Slow-release fertilizers can save you time and money.**

- They pose less risk of damage to plants, and can be less damaging to the soil.
- Slow release fertilizers can be applied less often since they dissolve more slowly, reducing the time needed to apply.
- With fewer applications needed, slow-release fertilizer is a smart investment.

## Who We Are

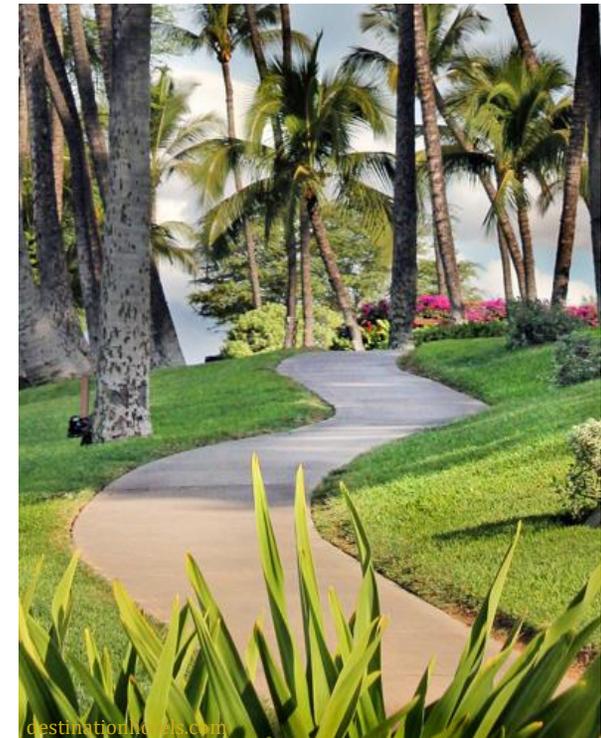
### About Us

Brought to you by passionate graduate students in the Department of Natural Resources and Environmental Management, at the University of Hawai'i at Mānoa.

### For More Information

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# RESPONSIBLE FERTILIZER USE IN HAWAII

*Best Management Practices  
brought to you by UH-Manoa*

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FERTILIZER USE IN  
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## Why is fertilizer management important?

### Fertilizer use can impact water quality.

Fertilizer is any material, natural or synthetic, that is applied to soils or plants to supply nutrients. Fertilizer runoff is rich in nitrates, which can readily enter coastal waters. In excess, these nitrate inputs can damage ecosystems, such as coral reefs, and jeopardize human health.

## What's the issue?

### Fertilizer is often applied in excess.

Fertilizers are a potent source of nutrients that should only be added when the soil is in need. Often, too much is added too frequently.

### Currently, fertilizers available on the market are not ideal for use in Hawai'i.

Most fertilizers sold at stores in Hawaii are rapidly dissolved and deliver higher amounts of nutrients than a plant needs at a given time. In Hawai'i, fertilizers can easily be washed away and enter the ocean.

*“You wouldn't fill a gas tank that's full or has a leak, so why waste resources and money on a fertilizer your plants don't need?”*

*-Hannah, UH graduate student*

### There is no fertilizer regulation or recommendations of use in Hawai'i.

Fertilizer use, type, and labeling are unregulated, and many consumers are unaware of the negative consequences of poor fertilizer use.

## What can you do?

### Slow-release fertilizers are recommended.

A slow-release fertilizer dissolves more slowly than fertilizers designed for immediate plant availability, meaning the nutrients are available longer and less excess nutrients can enter runoff or leach into the soil. To be slow-release, the fertilizer's nitrogen source should be at least 30% insoluble, but a higher percent is recommended if available.

### Calculate the appropriate amount of fertilizer for your green space.

Look for nitrogen in these forms on the label:

Quick or Soluble	Slow or Controlled
Nitrate-N	Sulfur Coated Urea (SCU)
Ammonical-N	Urea-Formaldehyde
Urea – N	Ureaform
Other water soluble N	Polymer Coated Urea (PCU)
	Biosolids (Note N:P ratio)
<b>Soluble: 0.5 lb N / 1000 ft<sup>2</sup></b>	<b>Slow Release: 1 lb N / 1000 ft<sup>2</sup></b>

### Fertilizer shouldn't be applied during the wet season.

During periods of heavy and frequent rain, applied fertilizer does not effectively reach the plant or soil, and can quickly be washed away.

### Let your representatives know you support fertilizer regulation.