



IFAS EXTENSION

## Coordinated Farm Cropping Patterns for Phosphorus Control on Organic Soils <sup>1</sup>

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This fact sheet is part of a BMP series which was written specifically to address the concern for phosphorus control in the Everglades Agricultural Area. The information contained in the series may be applied to any agricultural area composed primarily of organic soils or Histosols. However *please be aware that this information may not be applicable to any other soil types.*

### BACKGROUND

This Best Management Practice is a necessary part of the Water Management BMPs but is not a BMP by itself. This BMP refers to changing the farm cropping patterns of vegetables, sugarcane, flooding fallow, etc. to accomplish the optimal use of the above BMPs. For example, retention of vegetable drainage in surrounding lands cannot be successfully implemented if available sugarcane fields are not conveniently located near the vegetable fields (see Retention of Vegetable Drainage Water in Sugarcane or Fallow Lands). Because of the above-described relationship, any specific reductions in phosphorus due to coordinated cropping patterns would be reflected in the above individual BMPs.

Though not BMPs in their own right, coordinated farm cropping patterns are critical to the success of a BMP program. The blocking and rotation of crops

offer significant operational and water quality advantages. Additional planning will be needed to assure that future crop rotations do not create one of the following situations:

- \* vegetable production status lacking sufficient sugarcane land for water retention,
- \* inability to hydraulically isolate water-sensitive crops within a large farm operation,
- \* insufficient isolation of the flooded fallow lands needed to successfully generate hydraulic control or aquatic crop (rice) production, or
- \* large changes in farm phosphorus losses which create potential regulatory problems.

One cropping pattern change which could be considered a BMP is the definitive change from one crop to another in order to reduce phosphorus losses from the farm. Moving from high fertility and water management crops to low fertility and water management crops can reduce phosphorus losses. In situations where additional phosphorus reductions are required and the existing BMPs for the crop being grown do not meet this requirement, a crop change may be your only option. However, we could only consider this change a BMP if the economic vitality of the farm is not adversely impacted by it.

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