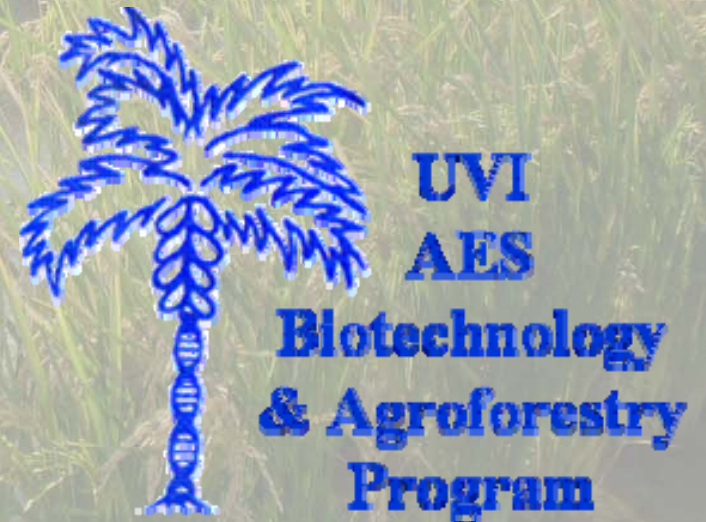


# **Evaluation of Flood and Drip Irrigation for Rice Production on St Croix, USVI**

**By**

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**Paddy Rice**



**Upland Rice**



# Materials and Methods

**Varieties: Cybonet, Bengal, Neptune, Taipei**

**Plots of 4 rows/variety 10'' between rows**

**Planted November 20<sup>th</sup>**

## Fertilizer

**Dec 24 275 lb 20-20-20**

**Jan 11 125 lb  $(\text{NH}_4)_2\text{SO}_4$**

**Jan 24 75 lb Urea**





Wind



# **Irrigation**

**Drip Tape emitters 1 ft spacing**

**Drip lines 20'' apart**

**Injector used to apply fertilizer**

**Jan 14 Levee installed to create paddy for flooding**





**Jan 29**

**Feb 25**  
**Cybonet Anthesis**



**Mar 25**





**April 8**



**Harvest  
20 ft  
Center 2 row**



**Thresh, Clean  
and Dry Seeds  
to 12%**



# Table 1. Yield from three varieties of rice grown with either drip or flood irrigation on St Croix, USVI

<b>Variety</b>	<b>Height (Inches)</b>	<b>Pounds/Acre*</b>	
		<b>Drip</b>	<b>Flood</b>
<b>‘Cybonet’</b>	<b>15.3</b>	<b>2,565 a</b>	<b>2,015 b</b>
<b>‘Bengal’</b>	<b>20.4</b>	<b>3,535 a</b>	<b>3,720 a</b>
<b>‘Neptune’</b>	<b>21.7</b>	<b>3,240 a</b>	<b>2,930 b</b>

**\*Differences between treatments LSD  $P=0.05$**



**Table 2. Water usage under drip or flood irrigation of rice grown on St Croix, USVI**

<b><u>Treatment</u></b>	<b><u>Gallons of Water</u></b>
<b>Drip</b>	<b>1,100,000/acre</b>
<b>Flood</b>	<b>1,500,000/acre</b>



## **Conclusion**

**Drip irrigation can supply water for paddy rice**

**Drip irrigation uses less water than flooding**

**Drip lines can be a problem until plants are established**

**Drip lines increase cost of production**

A wide-angle photograph of a lush green rice field. The rice plants are in various stages of growth, with some showing developing panicles. In the background, there are rolling green hills under a clear sky. A few small buildings and trees are visible on the distant hillside.

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# Questions?

