

## GreenSeeder Implementation Report: Initial Honduras Test Plots

Plot GPS Coordinates: 15.806852, -87.838447  
 Implementer Name: Eric Lam  
 Farmer Name: Alfredo and Flor Munoz  
 Planting Date: April 2, 2014  
 Harvest Date: Anticipated to be sometime in July 2014



**Normal Local Planting Procedure:** They use a wooden stick to punch a hole in the ground every 20 inches. They alternate number of seeds in each hole with two, three, two, three, etc. Distance between rows is between 3 to 4 feet. After dropping the seeds in to the holes by hand, dirt is kicked over the seeds and 12-20-12 fertilizer and a granulated pesticide (\$2.50 US/lb) is placed over each mound. Urea (\$0.30 USD/lb) is applied in the same manner, but only at mid-season.

**Experimental Plot:** Followed standard protocol as laid out on page 13 in the GreenSeeder manual.

**Remarks from Implementer:** There is a great potential for the planter to be used as a delivery system for fertilizers and granulated pesticides, this is where I found the most interest. I think when the units are shipped, they should come with a blank bushing for the tip or maybe a dedicated topdressing tip. We had problems with the slotted/built-in brush rubbing against the outer housing, sometimes jamming the sliding action. When I was planting with the farmers, they invited their carpentry class to come and help, so it was a nice teaching opportunity. The women seemed to understand how to use the planter better than the men. They had a tendency to punch the hole, then push the planter forward to watch the seed fall in to the hole. If there was a blank, then they would re-plunge the device. After they got used to it, they would wait for the seed to audibly “ping” off of the back of the tip before proceeding to the next hole. Every tip we used broke, heavier gauged steel or a reinforced tip is recommended.

**Remarks from Farmers:** They like the planter, and think it is a great idea. They said they would pay \$50USD for such a device to help them apply fertilizer and plant corn, beans, and squash. They plan to use it for one year before returning it, and will share it with their neighbors. They also welded rebar to reinforce the tips.

Seed Identification	Seed Type	Seed Size, seeds/kg	Seed Price, \$USD/lb
Red	Uniform, Coated, Hybrid	3100	0.90
Yellow	Variant, Not Coated, Open Pollinated	3900	0.15

Seed Drum	Seed Identification	Brush Type	Singles, %	Multiples, %	Blanks, %
450S, rounded	Yellow	Slotted/Built-In	57	3	40
450S	Red	Slotted/Built-In	44	0	56
450S	Yellow	Internal Mount	54	35	11
450S	Red	Internal Mount	68	8	24
260-20, triangulated	Yellow	Slotted/Built-In	51	3	46
260-20	Red	Slotted/Built-In	56	5	40
260-20	Yellow	Internal Mount	67	17	16
260-20	Red	Internal Mount	65	11	24

