

## FBGA Key Project - August Data and Analytics

We have our latest data from the 4 farms participating in the Key Project. This was collected generally as of August 11th. I have attached Don Rockwood's Summary and he made a few observations:

- July (i.e., ~ 6/10-7/8) was the most productive month at all farms,
- Fatout and Merrick have added the most new culms per acre to date,
- Hi Hat tended to have the largest average Base Diameters.

As a reminder, we are basically counting, measuring and documenting the new shoots each month and this is done in the 1st or 2nd week of the month. We refer to the period ended July 8th as the July data even though most of that data represents June. Each month we are able to calculate from the new season shoots their approximate weight and extrapolate that information through the end of the season as a projection of Total Production for the season. Each month this estimate becomes more accurate.

In the latest period we reviewed the measuring procedures and made some corrections. You will now see in the latest summary, below, a more accurate accumulation of the new season shoots as Production but also in calculating the portion that is under 3" in diameter that don't qualify to be harvested. This latest period ended 8/11 had 55% lower Shoot Production than in the prior month.

### FBGA Analysis from FFGT and IFAS Key Project Research

*(Projections to improve with monthly data)*

Farm Name	Baseline Basal Area / Acre	Three Months (thru 8/11) Production LBSs / Acre	Season Production Projected / Ac	% Less than 3" Diameter
Fatout Farm	137.2	4,744	9,488	24%
Merrick 27	84.8	4,330	8,660	53%
MFA	95.7	3,420	6,840	48%
Hi Hat Ranch	111.3	2,899	5,798	22%

Faced with harvesting reports over the last several years that didn't validate farmer expectations, our ability to define accurately what the farms are producing is important as we need greater certainty in the outcome of our farms. Projected season production/acre by farm ranges from 6,000 lbs to 10,000 lbs per acre which are all encouraging numbers as we expect them to get even larger as the plants become mature.

Reconciliation with Harvest - The Key Project is focused on Production rather than Harvest but with our measurements we are able to identify the portion of Production coming from shoots that are less than 3" in diameter and therefore don't meet the industry's minimum specification requirement for harvest. Having this information enables us to reconcile monthly production with the actual harvest.

We named this research project the Key Project because of what it would unlock in our understanding of bamboo plants and how they grow. This week it has revealed something we didn't know and which is very important. It may shock you. You can see in the Reconciliation below by farm the production by month, the % harvestable (greater than 3")

and the resulting pounds harvestable by acre which are then compared to actual harvested quantities by acre. *The result is the realization that we are only harvesting roughly 2% of the harvestable production.* It is only because we have this data that we are able to see this truth.

Pounds Production / Acre	June	July	August	Pounds Production / Acre	June	July	August
<b>Fatout</b>	2,015	2,134	595	<b>Merrick 27</b>	1,182	2,143	1,005
% Harvestable (>3")	76%	76%	76%	% Harvestable (>3")	47%	47%	47%
Pounds Harvestable	1,522	1,612	449	Pounds Harvestable	552	1,000	469
Actual Harvest / acre	29	102	0	Actual Harvest / acre	4	9	3
Unharvested / acre	1,493	1,510	449	Unharvested / acre	548	991	466
% Not Harvested	98%	94%	100%	% Not Harvested	99%	99%	99%
<b>Hi Hat</b>	240	1,748	947	<b>MFA</b>	1,432	1,270	772
% Harvestable (>3")	78%	78%	78%	% Harvestable (>3")	52%	52%	52%
Pounds Harvestable	187	1,362	738	Pounds Harvestable	740	657	399
Actual Harvest / acre	0	40	23	Actual Harvest / acre	18	9	5
Unharvested / acre	187	1,322	715	Unharvested / acre	723	647	394
% Not Harvested	100%	97%	97%	% Not Harvested	98%	99%	99%

One important thing we learn from this is that our Harvest is not the best way to understand production. But it shines light on the need to dramatically change how we harvest.

I want to encourage you as you read this to see the good news for farmers, that they can expect more from their farms than the small harvests over the past several years. Remember that our industry has 3 ingredients that are critically necessary - bamboo farming is farmable at scale, it is very productive, and it has large existing markets for its crops. Anything else we run into may be a pioneering challenge but not a critical problem. Imagine early in the citrus industry - they likely focused on being good growers. And then it became important to address how to get it all harvested. We are in that same place. Improving how we harvest is an important opportunity and will be good for the Florida bamboo industry.