

# Bejo Myanmar Onion Trials 2018-2019

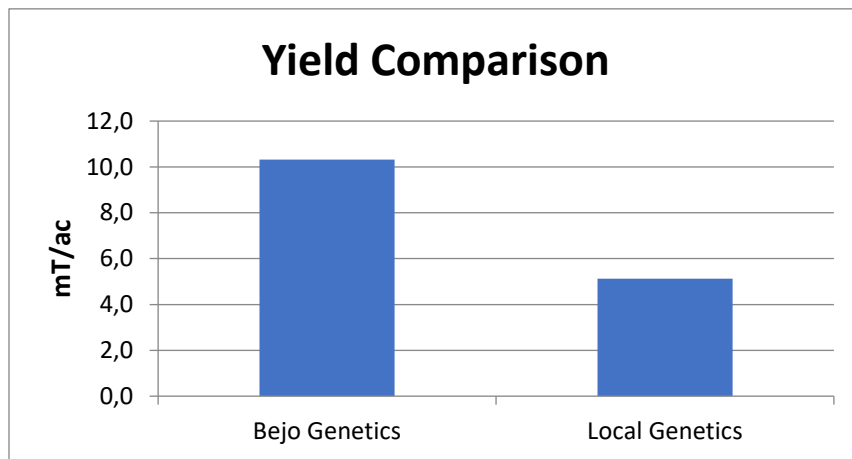
## Introduction

Last season we've done tests with Bejo varieties vs local varieties under transplanted and direct seeded conditions. This has been done at Triple 999 farms in Myingyan. Due to heavy rain (beginning of January) with flooding, field was far from optimal. Given the fact that all region had the same problems we've decided to continue with the field for open field day.

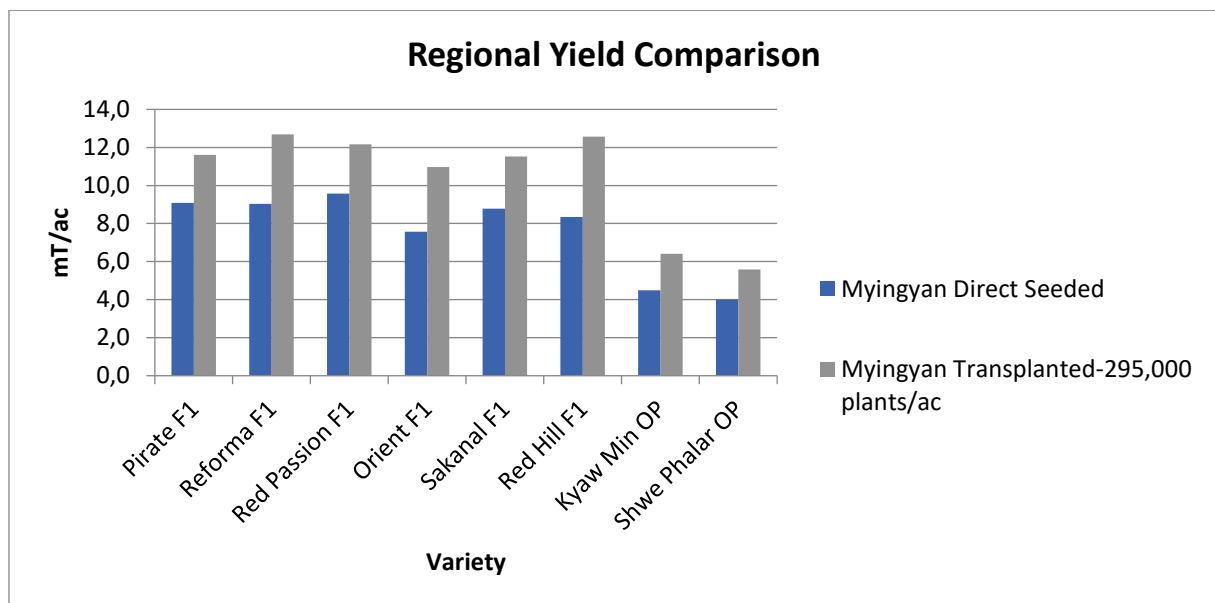
## Results

### Yield

Bejo genetics performed in general better than local genetics (Kyaw Min OP and Schwe Phalar OP). Average Yield of Bejo genetics was 10,3 mT/acre compared to 5,1 mT/acre (NB double yield).



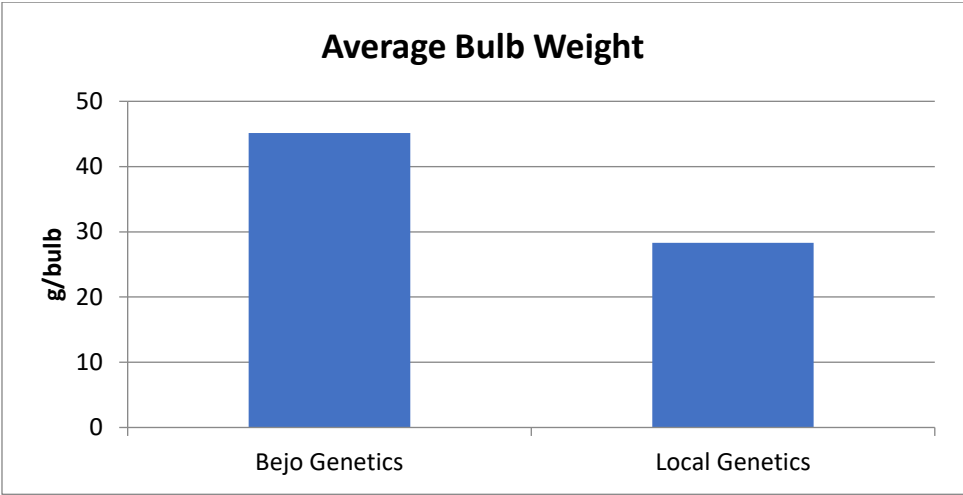
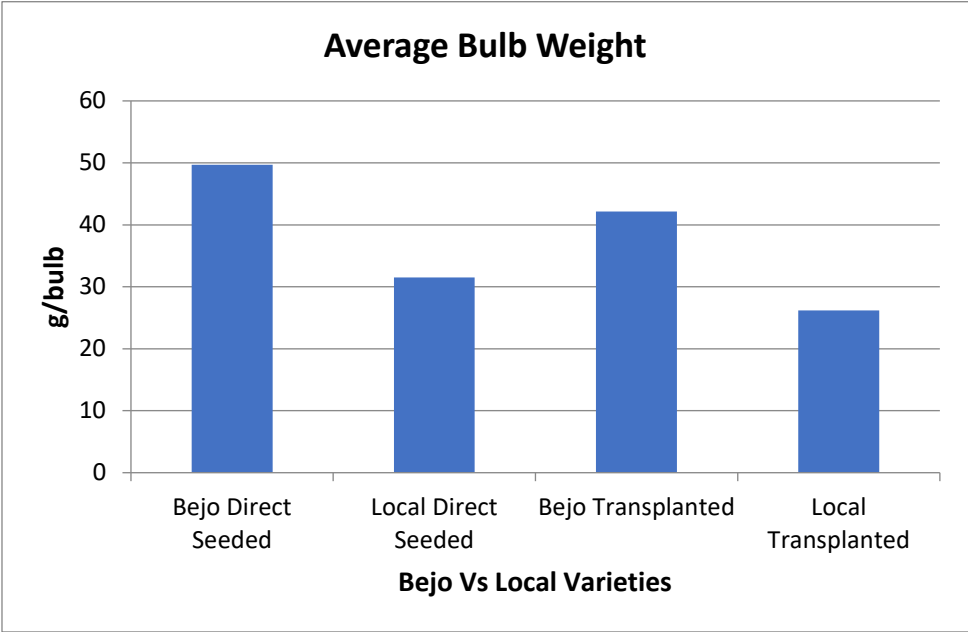
Also there were some differences between the varieties noticeable.



Overall average of Direct seeded was 7,6 mT/Acre vs 10,4 mT/Acre for Transplanted method.

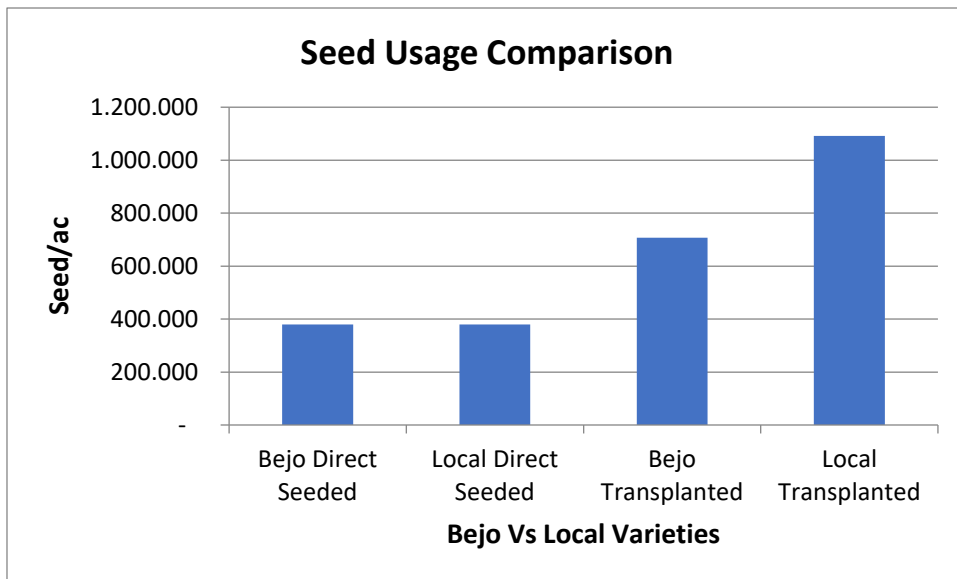
**Bulb weight**

In general the bulb weight of our varieties was higher



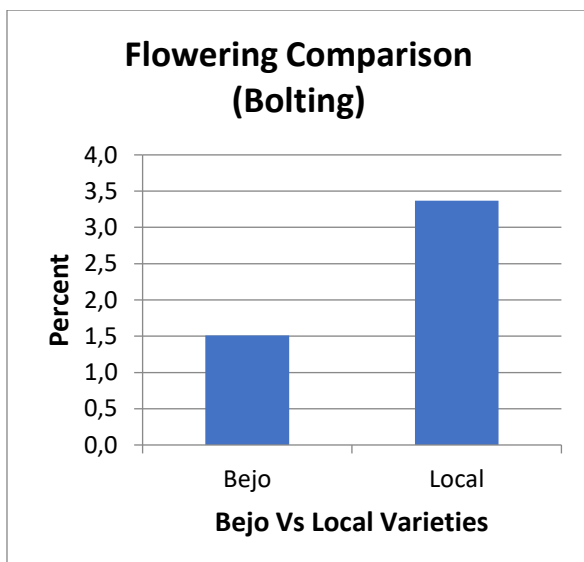
**Emergence**

Big difference where already noticed at the population counts. This figure is mainly influenced by the quality of seed processing. Due to the higher emergence, the seed efficiency of Bejo varieties is higher. Therewith the seed usage per acre is limited in comparison with local varieties. NB 250.000 seeds is approximately 1 kg. Local standard for seed usage is 5 kg/acre.



### Flowering/Bolting

Flowering is considered a negative effect, since this will result in yield loss and problematic storability. Flowering is heavily depending on genetics. We've noted the flowers per field in percentages. In general bolting above 5% will result in problems in storage and will negatively influence yield.



## Economic Analyses

Underneath a economic comparison between the different methods and genetics (Bejo vs local)

<b>Crop Economics Analysis</b>				
	<b>Bejo Direct Seeded</b>	<b>Bejo Transplanted</b>	<b>Local Direct Seeded</b>	<b>Local Transplanted</b>
Seed Required (Seeds/ac)	379.406	707.568	379.406	1.091.947
Seed *	190	354	41	117
Land Preparation	79	79	79	79
Fuel for Irrigation	66	33	66	33
Crop Nutrition	164	164	164	164
Crop Protection	132	132	132	132
Labor **	230	329	230	329
Bag Cost (32kg/bag)	23	26	10	16
Freight out	112	127	49	77
<b>Total Cost (\$/ac)</b>	996	1.243	770	946
<b>Yield (mT/ac)</b>	11,1	12,6	4,8	7,6
<b>Price (\$/mT)</b>	141	141	141	141
<b>Revenue (\$/ac)</b>	1.568	1.772	680	1.071
<b>Margin (\$/ac)</b>	572	529	-/- 90	125
<b>Margin (%)</b>	36%	30%	-13%	12%
Ex Rate (MMK/USD)	1520			

\*indicative seed price: 125 USD per 250.000 seeds

\*\* based on 99 USD/acre extra labor costs for transplanting vs direct drilling labor costs.

Under local standard (transplanting) margin will improve from 12% to 30% (2,5 times) by using Bejo genetics.