Ministry of Agriculture, Livestock and Irrigation
Department of Agriculture, Kayah State

# Findings on Upland Paddy Varietal Trial in Kayah State

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# Contents

# Introduction…..

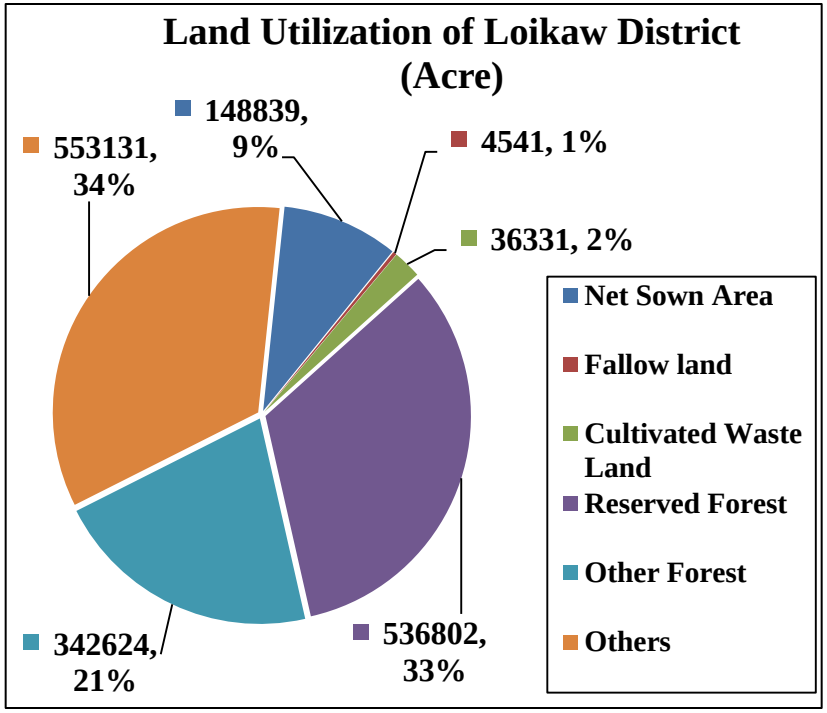
- Upland rice is a major staple food crop in hilly and remote area of Kayah State especially in some Townships of Loikaw District and cultivated acre has about 25900.
- Traditional local upland rice varieties “Bopyaco” and “Botsop” include pigment, aroma and good eating quality, but yield are very low.
- It needs to select potential upland varieties with reasonable yield, good eating quality and have good adaptability to local agro-ecological condition.

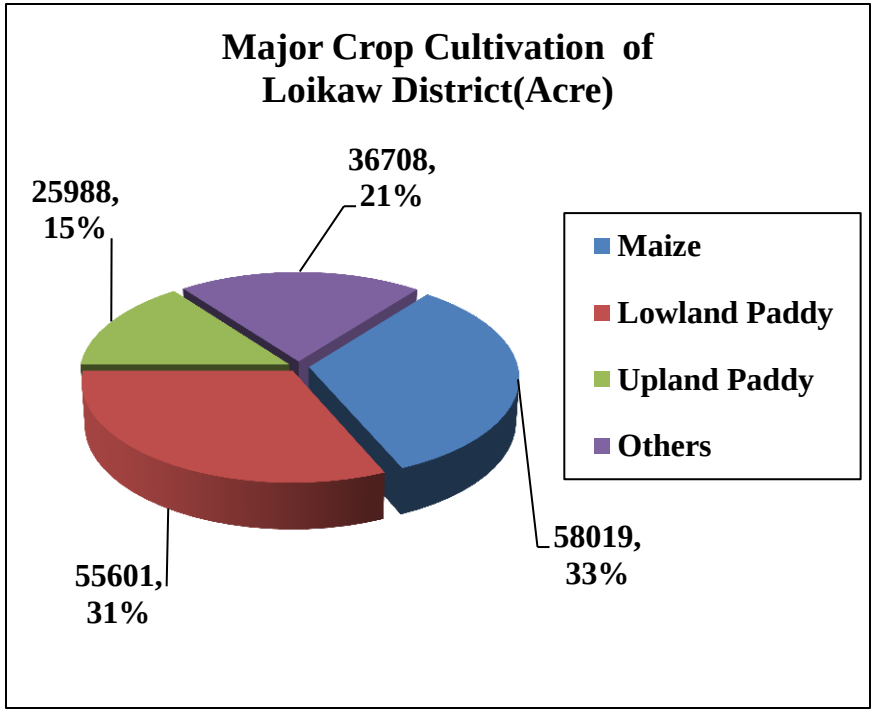
# Introduction…..

Climate and Agro-ecological Condition

Total Rainfall - 40.72 inches

Temperature - (4 - 37.5 ) ˚ C



# Purpose

**To select potential upland rice varieties with:**

- reasonable yield
- good eating quality
- high resistance to pest
- good adaptability to local agro-ecological condition

# Activities

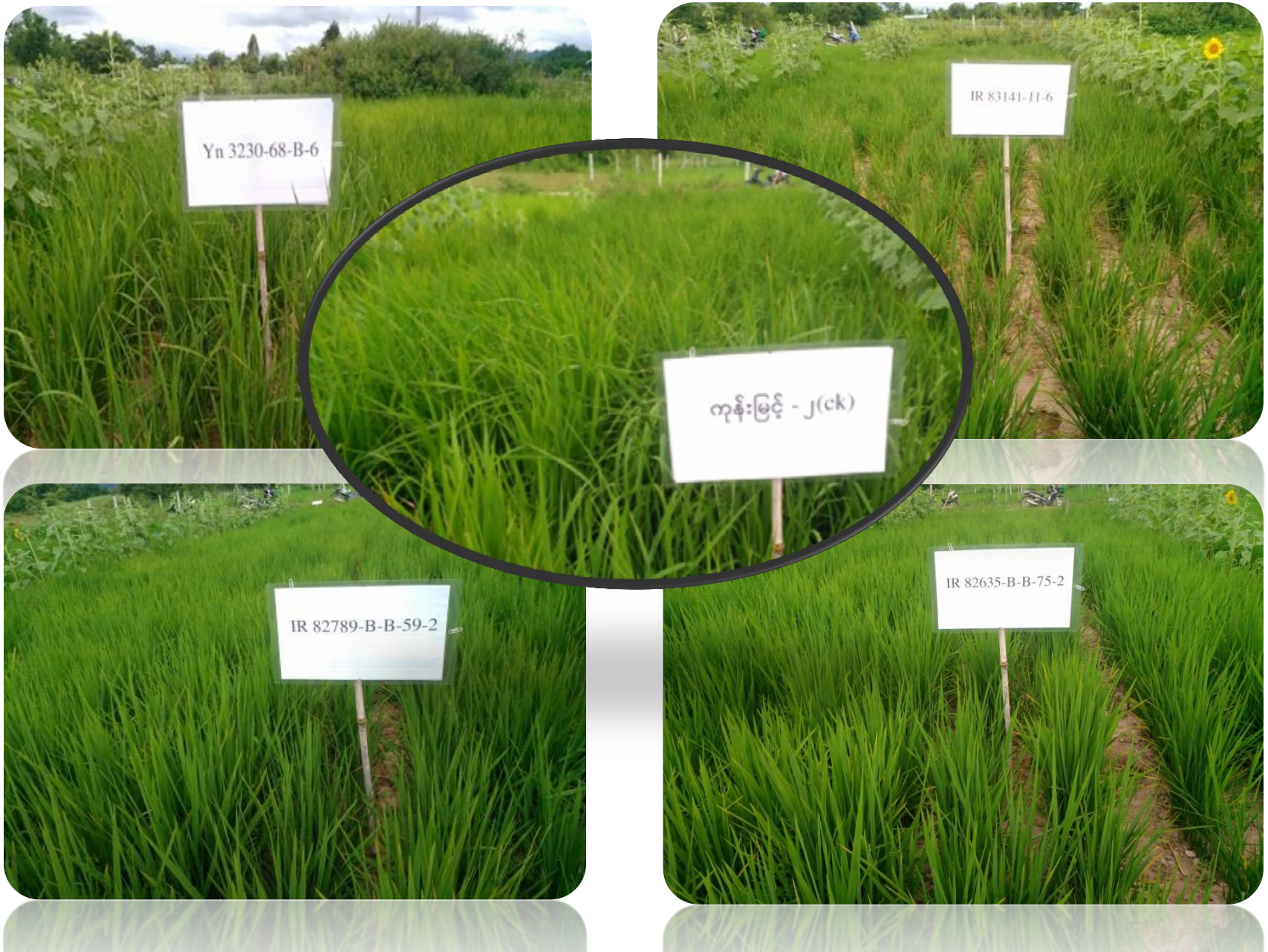
- Trial Name - Upland Rice Varietal Trial
- Test varieties - 5 Varieties (From DAR)
  Yn3230-68-B-6
  IR 83141-11-6
  IR 82589-B-B-59-2
  IR 82635-B-B-75-2
  Kon Myint -2 (Control variety )
- Trial location - Loikaw district, Deemosotownship
- Farmer's Name - U Marr Ko
- Season - Rainy Season

# Activities

# Activities…..

- Trial design - (5 × 1) Simple Yield Trial
- Total Plot Size - (0.075) acre
- Spacing - (10 inches x Continuous)
- No. of Rows/ Small plot - 24
- Fertilizer rate - Urea 50 Kg / acre
  T Super 25 Kg / acre
  Potash 25 Kg / acre
- Date of Cultivation - 27.6.2017
- Date of Harvest - 23.10.2017 to 30.11.2017

# Activities


Yn 3230-68-B-6
IR 83141-11-6
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IR 82789-B-B-59-2
IR 82635-B-B-75-2

# Activities

# Results

## Plant Character Data

| No | Particular | Varieties | | | | |
|---|---|---|---|---|---|---|
| | | Yn3230-68-B-6 | IR 83141-11-6 | IR 82589-B-B-59-2 | IR 82635-B-B-75-2 | Kon Myint-2 (Control) |
| 1 | Days 50% flowering | 92 | 100 | 100 | 100 | 92 |
| 2 | Date of 50% Flowering | 30.9.2017 | 8.10.2017 | 8.10.2017 | 8.10.2017 | 30.9.2017 |
| 3 | Plant Height (cm) | 114.5 | 74 | 77 | 98.6 | 112 |
| 4 | Rice Blast Resistance | Moderate | Moderate | Good | Good | Moderate |
| 5 | Growth Duration (days) | 118 | 155 | 155 | 155 | 118 |

# Results

# Results…..

## Yield Components Data

| No | Particulars | Variety | | | | |
|---|---|---|---|---|---|---|
| | | Yn3230-68-B-6 | IR 83141-11-6 | IR 82589-B-B-59-2 | IR 82635-B-B-75-2 | Kon Myint -2 Control var. |
| 1 | No. of plants / 6.6 ft x 6.6 ft plot | 2154 | 2461 | 1133 | 1185 | 1322 |
| 2 | No.of grains / panicle | 37 | 34 | 59 | 66 | 53 |
| 3 | No.of filled grains / panicle | 23 | 22 | 46 | 54 | 40 |
| 4 | % of matured grain | 62.34 | 66.95 | 78.82 | 82.00 | 76.73 |
| 5 | (1000) Grains Weight (g) | 23 | 24 | 23.5 | 23 | 23 |
| 6 | Yield / plot (Pyi) | 13.35 | 15.25 | 14.35 | 17.25 | 14.25 |
| 7 | Yield / acre (Bsk) | 54.57 | 62.33 | 58.66 | 70.51 | 58.25 |
| Rank (By Yield) | | 5 | 2 | 3 | 1 | 4 |

# Results

# Summary of Findings

- IR 82635-B-B-75-2 was found highest yield and preferred by farmers.
- No pest incident in all varieties.
- All varieties found well adaptation in poor soil fertility condition with acceptable yield.

# Conclusion

- All entries from DAR could be candidates as potential varieties due to no pest incidents, good adaptation to drought condition.
- Although all entry varieties found better performance, it need to be tested in more cropping season to identify other assessment such as milling recovery, cooking and eating quality conclusively.


Thank You!