

Certified Seed Production of Rice Seed in Timor Leste

Simão M. Belo, Basilio Pires, Cipriano Martins, Mario da Costa, Fernando Soares, Asep Setiawan

Seeds of Life, Ministry of Agriculture and Fisheries Republic Democratic of Timor Leste

Abstract

To supply quality seed of Nakroma for Commercial seed producer, Seed Department in collaboration with contract farmers produce certified seed yearly. Certification procedures are implemented by seed officer both in the field and in seed laboratory. Four time field inspection was done by seed officer during the growing periods of the crop. Seed testing to determine Seed Moisture content, physical purity and germination rates is done in Seed laboratory by using random seed sample taken by seed officer.

Introduction

Variety of Nakroma was released by MAF in 2007. The variety was introduced from the Phillipine with the original name PSBRc 54. Average yield: 4.4 – 5 t/ha and Resistant to Blast and Tungro diseases.



Fig 1. Seed of Nakroma



Fig 2. Nakroma Rice Field

Method

1. Seed classes of Source Seed

- 1. Breeder Seed; 2. Foundation Seed; 3. Certified Seed

2. Production of Certified seed

- Foundation Seed should be used to produce certified seed
- Previous crop should be fallow for at least 6 month before planting
- Planting in line
- Isolation distance minimum 3 m
- Off types should be rogued properly
- Harvest when seed is mature



Fig 3. Transplanting, line planting, roguing, and Harvesting

3. Field Inspection by Seed Officer should be done:

- Before planting (Location, field condition, previous crop, and source seed used will be inspected)
- Vegetative stage (max off type $\leq 0.5\%$)
- Generative stage (max off types $\leq 0.5\%$)
- Close to harvest stage (max off types $\leq 0.5\%$)

4. Seed Threshing, Cleaning and Drying should be done in seed warehouse

- Seed should be threshed properly by using thresher
- Seed should be dried properly till reach moisture content 13 %
- Dry and clean seed should be stored in the air tight Silo
- For distribution, seed should be labelled and bagged in 5 kg plastic bag



Fig. 4. Seed drying, cleaning and storing in silo

5. Seed Sampling and testing

- 1kg of submitted sample will be taken by seed officer and send to seed lab
- Routine seed quality test is conducted by seed analyst in seed laboratory to determine seed moisture content, physical seed purity, and germination rates.
- Laboratory standard of source seed of rice can be seen in Table 1.



Fig. 5. National Seed Laboratory



Fig. 6. Rice seed testing by seed analyst

Result

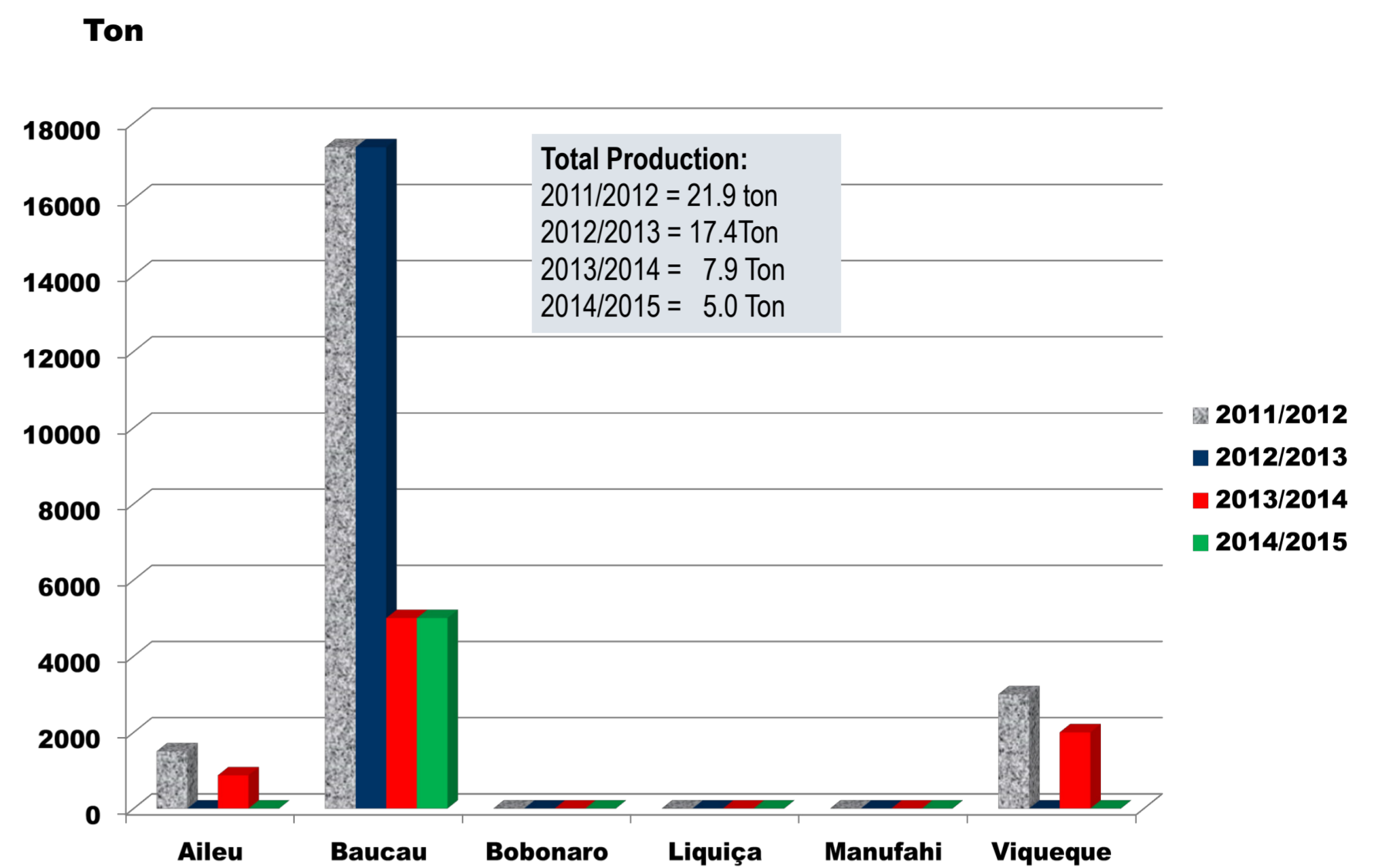


Fig. 7. Production Certified Seed of Nakroma Rice (2011 – 2015)

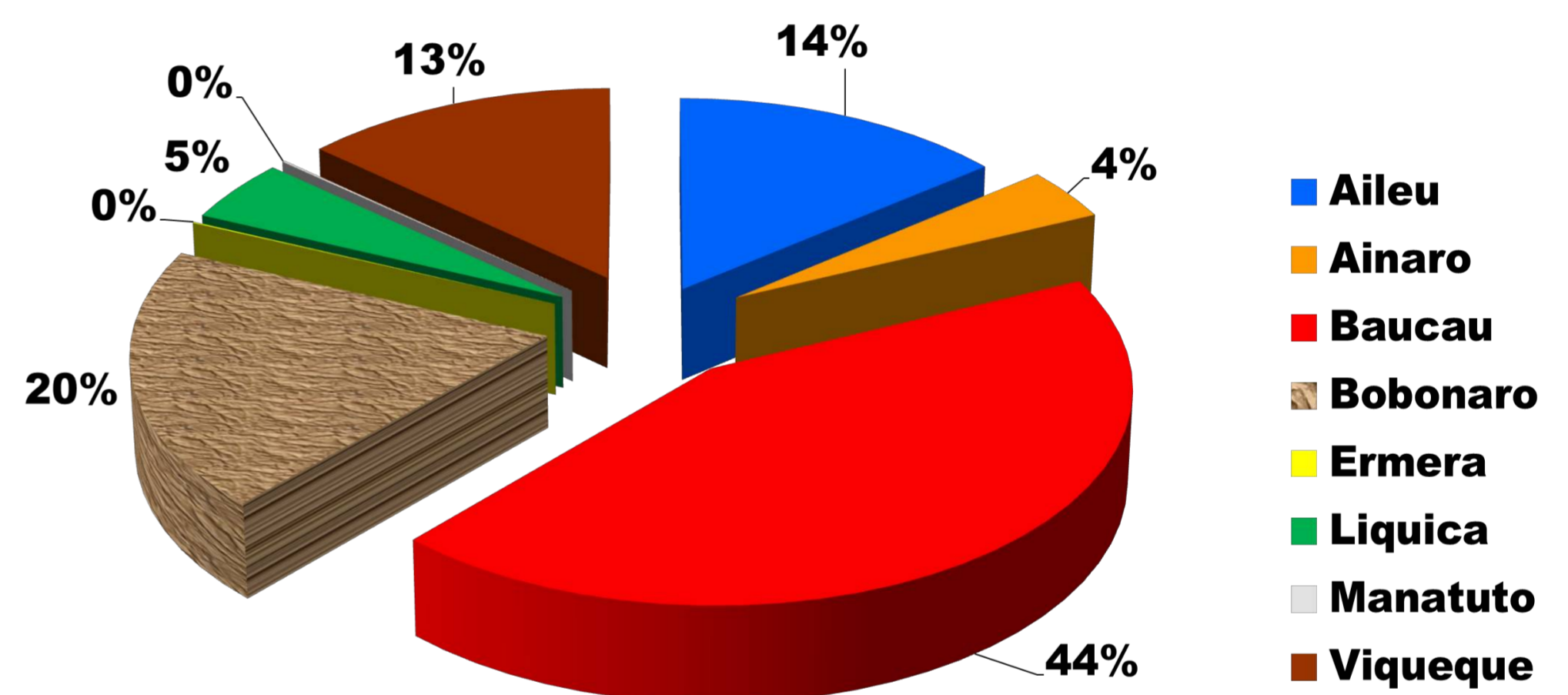


Fig 8. Distribution of Certified seed of Rice - Nakroma for 2015/2016 planting season

Table 1. Standard Laboratory of Certified Rice Seed in Timor Leste

Seed Class	Moisture content, max (%)	Germination rate, min (%)	Physical Purity min (%)	Seed of other variety max (%)
<i>Foundation</i>	13	80	99	0.0
<i>Certified</i>	13	80	98	0.2

Acknowledgment

