

# Rice varieties:

## Rice (T.aman varieties):

### **Binasail:**

It is a low input tall variety (135-140 cm) released in 1987, specially suitable for late transplantation after the flood water recedes which helps the rehabilitation of the people of flood prone areas.

This variety can be grown even on natural precipitation.

More straw may be obtained by cultivation of Binasail.

Maturity period ranges between 135-140 days.

Moreover, it matures 2-4 weeks earlier if transplantation is done in optimum time, which also facilitates growing of early winter crops. Maximum grain yield potential is 5.0 t/ha (av. 4.2 t/ha) if transplantation is done in normal time, while at late transplantation, grain yield ranges between 3.0 and 3.5 t/ha. Husking recovery of grains is more than many other rice varieties. Grains are medium fine with good cooking quality.



### **Binadhan-4:**

It is also an early maturing variety released in 1998 that takes about 130-135 days to mature. After harvest of this variety, wheat/oil crops/pulses can be grown in optimum time.

It is a good variety for increasing cropping intensity. This variety is more tolerant to major diseases and insect-pests. Maximum grain yield is 5.5 tons/ha (av. 4.7 t/ha). Grains are long and slender. Binadhan-4 produces high quality rice, which is exportable, and its local market price is higher than many other T. aman varieties. .



#### **Binadhan-7:**

It is a short duration and high yielding transplanted aman variety with good quality of rice released in 2007. Crop duration is 110-120 days from seed to seed. As the variety of early maturing, facilitate rabi crop cultivation like potato, mustered, wheat etc. after harvesting the variety in aman season. It is more tolerant to sheath blight, leaf blight and stem rot. This variety is also more tolerant to major insect-pests specially to Brown Plant Hopper (BPH) and hispa. . It produce grain yield is 5~5.5 t/ha. Paddy as well as the rice is long and fine. Rice is tasty and grain are bright color having higher market price. It can be transplanted little bit late as it is a short duration variety. It can also be cultivated in boro ans aus seasons. It is a very good variety for monga mitigation at northern part of Bangladesh.



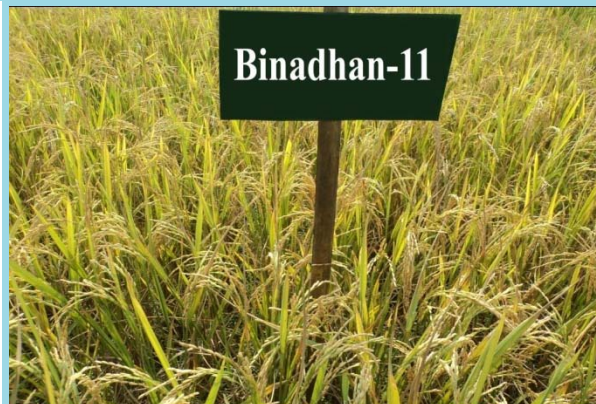
#### **Binadhan-9:**

Binadhan-9 is an aromatic T. aman rice variety with long and slender grains, released in 2012. It's height is 100-110 cm, lodging resistant, takes 118-123 days to mature which facilitate timely cultivation of mustard/rapeseed, pulses, potato and winter vegetables. It produces grain yield of 3.0-4.15 t/ha (av. 3.7 t/ha). This variety performs better at Dinajpur, rangpur, jamalpur and Pabna districts.



#### **Binadhan-11:**

Binadhan-11 has been released in 2013 as a submergence tolerant early maturing rice variety for aman season. This variety possesses green and erect flag leaves. Leaves remain green till maturity. Medium long grain and 1000-grain weight is 28.1 gm. Duration of this variety is 130-135 days (under 20-25 days submerged condition) and 115-120 days for non submerged condition. In submerged condition, potential yield is 4.5 t/ha (average 4.2 t/ha). This variety is capable to produce 5.0-5.4 t/ha in non submerged condition.



#### **Binadhan-12:**

Binadhan-12 is a submergence tolerant rice variety for aman season, released in 2013. It takes about 140-145 days (under 20-25 days submerged condition) and 125-130 days for non submerged condition. In submerged condition, it produces grain yield of 3.8-4.0 t/ha (average 3.5 t/ha). This variety is capable to produce 4.2-4.5 t/ha in non submerged condition. Leaves remain green till maturity. Medium short grain and 1000-grain weight is 16.0 gm.



#### **Binadhan-13:**

The mutant KD5-18-150 has been released as Binadhan-13, a fine grain aromatic rice variety suitable for cultivation in T. aman season of Bangladesh. It has been developed from local fine grain aromatic rice cultivar Kalizira with the application of gamma radiation and Datura extract. The mutant contains most of the characters of Kalizira. The main characteristics of Binadhan-13 are as follows: • Leaves remain green till maturity • Moderately lodging resistant • Unfilled grains are almost absent • Grain yield 3.2-3.6 t/ha • 1000-grain weight 13.2 g • Crop duration 138-142 days



### Binadhan-15:

#### History of development:

- Pedigree number: IR50
- Parentage: IR 2153-14-1-6-2/IR 2061-214-38-2/IR 2071-625-1-252

#### Characteristics:

- Premium quality and photo-insensitive variety
- Crop duration 115-126 days, 15-20 days early than BRRI dhan 38
- Medium and slender grains
- Thousand seed weight 21.0 g
- Average yield: 4.8 t/ha
- Yield increase over BRRI dhan 38 about 25%
- Growing area: All over the country



### Binadhan-16:

#### History of development:

- Pedigree number: OMCS-2007
- Parentage: OM1314/OM CS6

#### Characteristics:

- Short duration and photo-insensitive variety
- Duration: 100-108 days
- 8-10 days earlier than Binadhan-7
- Thousand seed weight 27.4 g.
- Medium slender grain
- Average yield: 5.5 t/ha
- Yield increase over Binadhan-7 about 10%
- Growing areas: Medium to high land areas, all over the country



### Binadhan-17GSR

- Suitable for Aman season
- Duration: 112-118 days
- Require less input
- Disease and insect tolerant
- Yield: 7.0 t/ha (average) in aman season

### Rice (Boro varieties):

#### Iratom-24:

It is an early maturing variety released in 1975 that takes about 140-145 days to mature during boro cultivation and 125-130 days during aus cultivation. Earliness facilitates to harvest this crop variety before early flash flood and also escapes hailstorm. Plants are semi-dwarf which do not lodge. The variety is moderately resistant to major diseases and insect-pests. Grains are finer than IR-8. Maximum grain yield potential is 8 tons/ha (av. 6 t/ha) in boro season while 4 t/ha (av.3.5 t/ha) in aus season.



#### Binadhan-5:

This variety released in 1998. Its plant is tolerant to lodging and height ranges between 110-115 cm. The variety takes about 150-155 days to mature and can produce a maximum grain yield of 8.5 t/ha (av. 7.0 t/ha). Grains are long, slender and bright in colour. Farmers can get more straw by cultivation of Binadhan-5.



**Binadhan-6:**

This variety also released in 1998. Its plant height is similar to Binadhan-5, but it bears more tillers and gives a maximum grain yield of 9.0 t/ha with an average yield of 7.5 t, which is higher than hybrid rice. Maturity period is about 160-165 days, i.e., slightly longer than Binadhan-5. Grains are medium bold and bright in colour.

**Binadhan-8:**

Binadhan-8 is a salt tolerant high yielding rice variety which is released in 2010. It is semi dwarf, early maturing and medium bold grain rice variety. Binadhan-8 requires 130-135 days to mature. It is moderately resistant to bacterial leaf blight, sheath blight, brown plant hopper, stem borer and rice hispa. Under salt stress, maximum grain yield is 5.5 t/ha (average 4.5-5.5 t/ha) and in non saline area, maximum 9.0 t/ha (average 7.5-8.5 t/ha). This variety is most suitable in saline areas of Bangladesh and also other non saline areas.



Fig.2. Field view of Binadhan-8

**Binadhan-10:**

Binadhan-10 is a salt tolerant variety for boro season which can tolerate up to 12 dS/m of salinity, released in 2012. The variety is capable to produce higher seed yield (5-6 t/ha under salt stress). Binadhan-10 is early maturing (127-132 days) than other salt tolerant varieties. The variety possesses deep green and erect flag leaves, trunks and stems are strong, sturdy and remain erect (no lodging) even in stormy weather and no shattering. Disease incidence and pest attacks are very low. In non saline condition, potential yield is 8.5 t/ha (average 7.5 t/ha). Grain is medium long, slender and bright colour. The variety is suitable for both aman and boro seasons.



#### **Binadhan-14:**

Binadhan-14 is a late transplanting potential high yielding boro rice variety, released in 2013. It has shorter, erect and lodging resistant plants. It is early maturing and has long and slender grains. Binadhan-14 requires 120-130 days (seed to seed) to mature and can produce a maximum grain yield of 7.6 t/ha and average is 6.85 t/ha which is 1.0 t more than BRRI dhan28. It can be transplanted after harvest of long duration and high yielding mustard/rapeseed varieties i.e. during 2nd week of February to 2nd week of March. It is tolerant to bacterial leaf blight, sheath blight and brown plant hopper. Grain protein content is 9.78%.



#### **Binadhan-18:**

Binadhan-18 is a moderate duration and high yielding boro rice variety, released in 2015. It was developed through carbon ion beams irradiation to the seeds of BRRI dhan-29. Plant height is 100 cm and it requires 148-153 days (seed to seed) to mature which is 13-15 days earlier than the mother variety BRRI dhan-29. Grain is longer than BRRI dhan-29. Thousand grain weight is 26.5 g and amylose and protein contents are 23.2% and 7.06%, respectively. It can produce maximum grain yield of 10.5 t/ha and average yield of 7.25 t/ha under favorable environment.

