

Dr. Md. Abul Kalam Azad, Director (Administration and Support Service)

(A) Area of Expertize/Interest:

Genetics and Plant Breeding: *Mutation Breeding*

- (1) Rice, (2) Wheat, (3) Jute, (4) Cotton, (5) Groundnut, (6) Onion, (7) Ginger, (8) Mulberry and (9) Silkworm for Stress and Favorable Environments.

(B) Achievements :Variety/Technology Developed

SL No.	Name of Technology developed	Importance of Technology developed	Remarks
Crop variety			
1.	Binadhan-25	A Boro rice variety, extra-long and fine grains, high yield, medium duration	
2.	Binadhan-20	A transplant Aman rice variety Zinc (27.5 ppm) and iron rich (20-30 ppm) in brown rice, duration (125-130 days), higher yield (4.5-5.5 t/ha)	
3.	Binadhan-19	Aus rice variety, drought tolerant, can be grown under rainfed condition, shorter duration (95-105 days), higher yield (4.0-5.0t/ha)	
4.	Binadhan-18	A Boro rice variety, high yield (average yield is 7.25 t/ha), 13-15 days shorter duration than the parent BRRIdahan29	
5.	Binadhan-14	A late Boro rice variety, high yield(6.9 t/ha), short duration (105-125 days), high temperature tolerant (>38°C)	
6.	Binadhan-9	An aromatic T.aman rice variety, long fine grain and short duration	
7.	Binagom-1	A salt tolerant wheat variety, high yield and salt tolerant	
8.	Binachinabadam-10	The highest yielding groundnut variety with coppery red testa	
9.	Binachinabadam-9	A salt tolerant groundnut variety, high yield and salt tolerant with coppery red testa	
10.	Binachinabadam-8	A salt tolerant groundnut variety with high yield	
11.	Binachinabadam-7,	A salt tolerant groundnut variety with high yield	
12.	Binachinabadam-6,	A salt tolerant groundnut variety with high yield	
13.	Binachinabadam-5	A salt tolerant	

		groundnut variety with high yield
14.	Binachinabadam-4	A highly popular groundnut variety with high yield, higher shelling percentage and medium pod and kernel sizes
15.	Binachinabadam-3	A bold seeded groundnut variety with high oil and protein, high yield and bold pod and kernel sizes
16.	Binachinabadam-2	A bold seeded groundnut variety with high oil and protein, high yield and bold pod and kernel sizes
17.	Binachinabadam-1	A bold seeded groundnut variety with high yield
18.	Binadeshipat-2, deshi jute variety with higher fiber yield and lustrous colour	High yield and lustrous fiber
19.	Binapatshak-1	A vegetable type Jute variety with high yield, leaves contain 10,700 IU of beta carotene and two anticancerous substances like mono galactocylacyl glycerol and phytol.
20.	Binapiaz-1	A summer (Kharif-1) type of variety of onion, annual, suitable for growing in Kharif-I season, bulb yield is 8.0-9.0 t/ha and seed yield is 500-1100 kg/ha.
21.	Binapiaz-2	A summer (Kharif-1) type of variety of onion, annual, suitable for growing in Kharif-I season, bulb yield is 9.0-10.0 t/ha and seed yield is 600-1300 kg/ha.

Technology Developed

1.	T. aman-Mustard - Patshak-Aus cropping pattern	<ul style="list-style-type: none"> • Suitable for all upazillas of Mymensingh • Increased cropping intensity by 200% • Net return increased 369 % • BCR 1.82 against 1.23 for existing pattern. • Saves irrigation water
2.	T. aman-Mustard -Boro cropping pattern	<ul style="list-style-type: none"> • Suitable for Mymensingh sadar, Nalitabari of Sherpur, Ranagpur sadar, Bishwambharpur of Sunamganj districts • Increased cropping intensity by 100% • Net return increased by 295 %, 216%, 235%, 261%, respectively, at the locations mentioned • BCR were 1.64, 1.62 ,1.56 and 1.55, respectively, for the locations mentioned
3.	T.aman-Potato-Boro cropping pattern	<ul style="list-style-type: none"> • Suitable for Rangpur sadar upazila • Increased cropping intensity by 100% • Net return increased by 535% over existing

		<p>pattern</p> <ul style="list-style-type: none"> • BCR was 1.60 while 1.22 for existing cropping pattern. 	
4.	T. aman-Grass pea-Aus cropping pattern	<ul style="list-style-type: none"> • Suitable for Sunamganj sadar upazila • Increased cropping intensity by 100% • Net return increased 275% over existing pattern • BCR for four crops 1.58 while 1.21 for existing cropping pattern. 	
5.	T. aman-Mustard-Jute cropping pattern	<ul style="list-style-type: none"> • Suitable for Kashiani upazila of Gopalganj • Increased cropping intensity by 100% • Net return increased 200% over existing pattern • BCR was found 1.55 against existing pattern 1.24. 	
6.	T. aman-Grass pea-Jute cropping pattern	<ul style="list-style-type: none"> • Suitable for Kashiani upazila of Gopalganj • Increased cropping intensity by 100% • Net return increased 247% over existing pattern • BCR was found 1.61 against existing pattern 1.24. 	
7.	T. aman-Lentil-Jute cropping pattern	<ul style="list-style-type: none"> • Suitable for Kashiani upazila of Gopalganj • Increased cropping intensity by 100% • Net return increased 256% over existing pattern • BCR was found 1.57 against existing pattern 1.24. 	

(C) Award:

In recognition to the contribution to *Genetics and Plant Breeding*: Mutation Breeding, I received total 4 (four) Awards as follows:

- (1) The Best Scientists Award-2015 from BINA,
- (2) The Young Scientist Award-2015 from the Plant Breeding and Genetics Society of Bangladesh
- (3) The BAAG Gold Medal-2018 from the Bangladesh Academy of Agriculture (BAAG),
- (4) The Integrity Award-2019 from BINA.