

PDS (Personal Data Sheet) Format

1. Name : **Mst. Aleya Nasreen**
2. Father's name : ATM Jamal Uddin
3. Mother's name : Aleya Khatun
4. Husband's name (If Applicable) :
5. Gender : Female
6. Present Address : 123/4 Jute Research Officers' Quarter, Bangladesh Jute Research Institute, Manik Mia Avenue, Dhaka -1207.
7. Permanent Address : Vill. & PO.-Shovenali, Upazilla-Ashasuni, District- Satkhira.
8. Date of birth : 10th December, 1968
9. Age (as on 01-01-2023) : 54 years 21 days
10. **Educational Qualification** :

Degree/Diploma/Certificate	Board/University	Year of Passing	Division/Class/Grade
Ph. D	Graz University of Technology, Graz, Austria	2009	Satisfactory
MS	Bangabandhu Sheikh Mujibur Rahman Agricultural University, Salna, Gazipur, Dhaka	1999	2 nd Class
Bsc. Ag (Hons)	Bangladesh Agricultural University, Mymensingh	1990	2 nd Class
HSC	Jessore Board	1986	1 st Division
SSC	Jessore Board	1984	1 st Division

11. **Field of Specialization:** Industrial Biotechnology

12. Training:

(a) In Country:

Sl.No.	Organization	Year	Duration		Name of programme
			Mons.	Days	
01.	BARD, Comilla	2000	3	15	Foundation
02.	BARD, Comilla	2000	-	21	Computer basic training
03.	BARC, Farmgate, Dhaka	2001	-	15	AEZ/GIS database management and its application in Agriculture
04.	BARD, Comilla	2003	-	21	Research Methodology for

					Social Science Researchers
05.	BARD, Comilla	2014	-	14	প্রশাসনিক এবং আর্থিক ব্যবস্থাপনা
06.	Krishi Gobeshona Foundation, Dhaka -1215	2014	-	06	Research Proposal Preparation and Scientific Report Writing.
07.	BJRI, Dhaka-1207	2018	-	02	Project Appraisal Study
08.	BJRI, Dhaka-1207	2018	-	03	Agricultural Project Management
09.	BJRI, Dhaka-1207	2019	-	01	Sustainable development Goal
10.	BJRI, Dhaka -1207	2019	-	01	E-filing
11.	BJRI, Dhaka-1207	2020	-	01	বার্ষিক গোপনীয় প্রতিবেদন (এসিআর) লিখন ও নিয়মাবলী
12.	BJRI, Dhaka-1207	2020		01	তথ্য অধিকার ও আইন
13.	BJRI, Dhaka-1207	2020	-	01	টেকসই উন্নয়ন অভীষ্ট (এসডিজি)
14.	BJRI, Dhaka-1207	2020	-	01	Public Procurement procedures
15.	BJRI, Dhaka-1207	2021	-	01	Annual Performance Agreement
16.	BJRI, Dhaka-1207	2021	-	01	অভিযোগ গ্রহণ ও নিষ্পত্তিকরণ
17.	BJRI, Dhaka-1207	2021	-	01	আয়কর রিটার্ন দাখিল
18.	BJRI, Dhaka-1207	2022	-	01	সেবা প্রদান প্রতিশ্রুতি
19.	BJRI, Dhaka-1207	2022	-	01	ই-গভর্নেন্স এবং উদ্ভাবন কর্মপরিকল্পনা বাস্তবায়ন

(b) Abroad: Not applicable

13. Experience:

Position	Period		
	From	To	Total (yr./Mo)
SO	30/06/1996	22/09/2004	8 years 2 months
SSO	23/09/2004	23/11/2015	11 years 2 months
PSO	24/11/2015	04/12/2022	7 years 10 days
CSO	05/12/2022	till date	> 2 Months

14. Publication:

List of all Publications, Photocopies of journal publications, photocopies of first page of other publications are to be attached.

(a)	Scientific Journal	No. of publication
	<p>(i) Full paper</p> <p>(a) Paper published in the Reputed International Journal</p> <p>(b) Other International & National Journal</p> <p>Principal Author:</p> <ol style="list-style-type: none">1. Mst. Aleya Nasreen, Md. Mahabub Ali, Taslima Rahman, Tahmina and Selina Akhter. (2022). Estimation of thiamine, riboflavin and niacin content in jute leaves. GSC Advanced Research and Reviews.13 (01), 116-1242. Mst. Aleya Nasreen, Zakaria Ahmed, Md. Mahabub Ali and Tahmina. (2022). Determination of β-carotene in jute leaves by spectrophotometry and thin layer chromatography. World Journal of Biology Pharmacy and Health Science. 09(02), 011-0203. Aleya Nasreen, Zakaria Ahmed, Mahabub Ali, Taslima Rahman and Tahmina. (2021). Effect of processing and preservation on L-ascorbic acid content in commercially cultivated jute leaves.GSC Advanced Research and Reviews.09(03), 063-0694. Nasreen, M. A., Ali, M. M., Akhter, S., Tahmina, Dayan, M. A. R. and Uddin, M. M. (2021). Mechanization of fibre extraction: an eco-friendly alternative method of jute retting. Journal of Science, Technology and Environment Informatics. 11(02). 749-7555. Aleya Nasreen, Zakaria Ahmed, Mahabub Ali & Tahmina Shimu. 2021. Jute Leaves: A potential sources of lycopene. International Journal of Vegetable Science. 28 (2):180-188 <p>Co- author:</p> <ol style="list-style-type: none">6. Md. Mahabub Ali, Balaram Ray, Begum Rokeya, Mst. Aleya Nasreen and Zakaria Ahmed. 2019. Potential Healing powers with Jute Plants- A review. Int. J. Sciences: Basic and Applied Research. 48(10): 10-23.	<p>16</p> <p>09</p> <p>07</p>

7. Md. Mahabub Ali and Mst. **Aleya Nasreen**. 2016. Sensory evaluation of dried jute leaves as vegetables and herbal tea. *Int. J. Sustain. Agril. Tech.* 12(1): 23-26.
8. Md. Mahabub Ali, **Mst. Aleya Nasreen**, Selina Akter, Md. Ashraful Alam and Md. Amir Hossain. 2013. Survey of Indigenous Knowledge of Jute Leaf in Bangladesh. *Int. J. Sustain. Agril.* 9(11):1-4.
9. Md. Mahabub Ali, **Mst. Aleya Nasreen**, F. A. Ara Dilruba, Md. Abdur Rahim and Isidore gomes. 2013. Study on *Bixa orellana* L. Seed germination by Various Treatment. *Int. J. Sustain. Agril. Tech.* 9(3): 5-9.
10. M. M. Islam, M. H. Rashid, **A. Nasreen** and I. Hossain. 2009. Garlic Paste as Ecofriendly Seed Dressing Fungicide for Production of Quality Capsularis Jute Seeds. *J. Environ. Sci. & Natural Resources*, 2(2): 131 -136.
11. Md. Shahidul Islam, **Aleya Nasreen**, Selina Begum and Samiul Haque. 2004. Correlated Response and Path Analysis in Tossa Jute (*Corchorus capsularis* L.). *Bangladesh J. Bot.*33 (2): 99-102.
12. M. N Islam, M.A.H Talukdar, **A Nasreen**, M. R Islam and M. M. Alam. 2004. Pesticidal Potentials of Some Indegenous Plants Against Grain Weevil, *Sitophilus granarius* L.(Coleoptera curculionadae). *J. Subtrop. Agric. Res. Dev* 2(2): 47-52.
13. M. Nazrul Islam, M.A.H Talukdar, M.L. Rahman, **A Nasreen**, S.M.M Ali and H. Banu. 2002. Comparative Efficacy of some indigenous Plant against Pulse Beetle. *Callosobruchus Chinensis* L. *Online J. Biol. Sci.* 2(5): 340-342.
14. M.Y.Sarker, A.K Azad, M.K Hasan, **A. Nasreen**, Q. Naher and M. A.Baset. 2002. Effect of Plant Spacing and sources of Nutrients on Growth and Yield of Cabbage, *Pakistan J. N Biol. Sci.* 5(6):636-639.
15. Ahsanul Haque, A.K.M Farukuzzaman, Hasina Banu, M. N. Islam, Md. Abdul Alim and **Aleya Nasreen**. 2001. Pesticidal Efficacy of some indigenous Plant Oils a giant the Mexican Bean Weevil, *Zabrotes Subfasciatus*. Boheman, (Coleoptera; Bruchidae). *Online J.Biol.Sci.*1 (11): 1034-1039

<p>Symposium Proceeding:</p> <p>International</p> <p>Principal Author</p> <p>Abstract: Effect of Starch phosphorylase on Rheological properties of starch.</p> <p>Lecture</p> <ol style="list-style-type: none"> 1. “ Effect of starch phosphorylases on Rheological properties of Industrially used Starch” Under ‘ Recent development in Enzyme technology’ 19 March 2009, Tsinghua University, Beijing. 2. “Improvement of jute fibre using enzymes” রাজস্ব বাজেটের আওতায় “ Quality control of Jute Goods” বিষয়ক প্রশিক্ষণ, 27 May, 2019. 3. “ Biotechnology for jute industry” ”পাট ও পাট জাতীয় ফসলের কৃষি প্রযুক্তি উদ্ভাবন ও হস্তান্তর” শীর্ষক প্রকল্পের আওতায় ”Training of Trainers for the Dissemination of Industrial Technologies on Jute”, বিষয়ক প্রশিক্ষণ 07March, 2018, BJRI, Dhaka 4. “ Biotechnology for jute industry” ”পাট ও পাট জাতীয় ফসলের কৃষি প্রযুক্তি উদ্ভাবন ও হস্তান্তর” শীর্ষক প্রকল্পের আওতায় ”Training of Trainers for the Dissemination of Industrial Technologies on Jute”, বিষয়ক প্রশিক্ষণ 28 February, 2017, BJRI, Dhaka <p>Workshop Proceedings:</p> <p>National</p> <p>Proceedings of the training-cum workshop on transferable Agricultural technologies for jute and allied fibre (JAF).</p>	<p>01</p> <p>04</p> <p>01</p>
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15. Research achievements: (as PSO/SSO/SO) (List duly enclosed by the Head of Division and director (Res)

- (i) No. of technology Developed: 2
1. Herbal tea from jute leaf
 2. Fibre extractor/producer machine (Mechanization of fibre production from green ribbon/bark without undergoing retting process)

(ii) No. of Research Programme:

(a) Developed

1. Enzyme technology for Jute fibre production/retting
2. Enzyme technology for jute cuttings
3. Development of machine for jute fibre production from jute ribbon
4. Biochemical analysis of jute leaves
5. Development of value added product from jute leaves e.g. jute leaf tea, jute leaf puree, jute leaf powder & jute leaf frozen vegetables

(b) Supervised

1. Application of microbial inoculums treatment for jute retting in laboratory
2. Application of enzyme treatment for jute retting
3. Application of enzyme treatment for jute cuttings in laboratory
4. Application of starch phosphorylase for de-sizing of starch sized jute yarn
5. Study of physical and chemical properties of jute fibre extracted/produced by machine
6. Determination of lycopene, L-ascorbic acid (vitamin-C), beta carotene (vitamin-A), thiamine, riboflavin and niacin content of Jute leaves
7. Studies of shelf life and antibacterial properties of jute leaf tea
8. Development of commercial product from jute leaves

(c) Executed

1. Annual Technical Research Programme;

- i. Isolation, Screening and enzymatic characterization of fungi and bacteria collected from jute retting fibre and water from different river, pond and concrete tanks.
- ii. Screening, isolation and characterization of fungi and bacteria from collected jute cuttings (untreated and treated) samples from jute mills.
- iii. Activity test, Production, and preservation of cellulase, xylanase and pectinase from jute retting bacteria.
- iv. Activity test of cellulase, xylanase and pectinase at different temperature, pH, substrate concentration and incubation period.
- v. Development of a fibre extractor/separator/producer machine.
- vi. Production of jute fibre (without undergoing retting process) from jute ribbon/bark by the developed fibre extractor machine
- vii. Study of physical properties of machine extracted jute fibre
- viii. Study of chemical properties of machine extracted jute fibre
- ix. Production of diversified product (pulp & paper) from machine produced fibre

- x. Determination of lycopene content in jute leaves
- xi. Determination of β -carotene (vitamin-A) content in jute leaves
- xii. Determination of L-ascorbic acid (vitamin-C) content in jute leaves
- xiii. Determination of vitamin B complex (vitamin B1, B2 and B3) in jute leaves
- xiv. Study of shelf life of jute leaf herbal tea

2. কৃষি মন্ত্রনালয়ের সচিবালয় অংশে "গবেষণা ও উদ্ভাবনী" ব্যয় খাতের আওতায় " Application of Enzyme Technology for Jute Fibre and Jute-based Product" শীর্ষক গবেষণা কর্মসূচি, ২০১৭-২০১৮ এবং ২০১৮-২০১৯।

15. Outstanding achievement: SO to PSO (Duly endorsed by the Head of Division and Director (Res) (Award received, supervision of MS/Ph.D. thesis, patent registered)

1. (i) Supervision of thesis:

Thesis	Thesis title	year	Name of the Student	University
MS	Isolation, Screening and Characterization of Jute Retting Bacteria	2015	Md. Abdul Haque Murad	Jahangirnagar University
B.Sc.(hons)	Characterization of Pectinase from Jute Retting Bacteria	2016	Nazifa Yeasmin	North South University
B.Sc.(hons)	Production and Characterization of Extracellular Xylanase from Jute Retting Bacteria	2016	Tanha Shafique	North South University
B.Sc.(hons)	Characterization of Extracellular Cellulase from Different Strains of Jute Retting bacteria	2016	Bipasha Sur	North South University

(Dr. Mst. Aleya Nasreen)
 Chief Scientific Officer
 Pilot Plant & Processing Division,
 BJRI

