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**BUREAU OF INDIAN STANDARDS**

**AGENDA**

|  |  |
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| **Technical Textiles for Agrotech Applications Sectional Committee, TXD 35** | **20th Meeting** |

|  |  |  |
| --- | --- | --- |
| **Date/Day** | **Time** | **Venue** |
| 10th November 2023  (Friday) | 1100h | Through Video Conferencing |

**Chairman:** Dr. Manisha Mathur  **Member Secretary:** Shri Tanishq Awasthi

**(**Joint Director, SASMIRA**)**

**Item 0 WELCOME AND INTRODUCTORY REMARKS BY THE CHAIRMAN**

**Item 1 CONFIRMATION OF THE MINUTES OF THE PREVIOUS MEETING**

**1.1** The minutes of the 19th meeting of the committee held on 17 April 2023 (Monday) were circulated vide BIS DG letter No. TXD 35/A2.19 dated 18th May 2023. No comments have been received.

**1.1.1**  The Committee may **APPROVE** the minutes as circulated.

# Item 2 COMPOSITION AND SCOPE OF TXD 35

**2.1** The present composition and scope of TXD 35 is given at **Annex 1 (P: 2 - 5).**

**2.1.1** The committee may **NOTE.**

**Item 3 ISSUES ARISING OUT OF THE PREVIOUS MEETING**

**3.1** A summary of actions on the various decisions taken in the last meeting is given at **Annex 2 (P: 6).**

* + 1. The Committee may **NOTE**.

**Item 4** **RESEARCH AND DEVELOPMENT PROJECT**

**4.1** The standard IS 16202 :2014 Agro Textiles — Woven Ground Covers for Horticulture Application — Specificationcomes under the domain of TXD 35 sectional committee.It is proposed that this subject may be taken up as an R&D project. The proposed ToR is given in **Annex 3 (P: 7 - 9)** for your reference. The guidelines for R&D project is attached separately.

**4.1.1** The Committee may **DECIDE**.

**Item 8 ANY OTHER BUSINESS**

**Annex 1**

**(***Item 2.1***)**

**Scope & Composition of Technical Textiles for Agrotech Applications Sectional Committee,**

**TXD 35**

**Scope:** To formulate Indian Standards for terminology, testing and specifications for technical textiles for agrotech applications such as horticulture, agriculture, forestry and animal husbandry etc.

**Meetings held Date and Place**

17th Meeting 21 April 2022, (through Cisco Webex)

18th Meeting 23 November 2022, (through Cisco Webex)

19th Meeting 17 April 2023, (through Cisco Webex)

SL ORGANIZATION NAME OF THE REPRESENTATIVE ATTENDANCE

NO. REPRESENTED PRINCIPAL/(ALTERNATE)

1. **Chairperson Dr. Manisha Mathur** 3/3

The Synthetic and Art Silk Mills

Research Association, Mumbai

2. Central Agricultural University, Imphal Smt Mamoni Provha Bora 0/3

3. ICAR - Central Institute for Research on Cotton Dr N Vigneshwaran 3/3

Technology, Mumbai (Dr P K Mandhyan)

4. Central Institute of Plastics Engineering & Dr Abdul Kader 2/3

Technology, Chennai (Shri Rajiv Kumar Lilhare)

5. Central Silk Board, Bangalore Dr. Y.C Radhalaksmi 0/3

(Dr. S. Nivedita)

6. Chandra Shekhar Azad University of Dr Ashok Kumar 1/3

Agriculture and Technology, Kanpur (Dr Jitendra Yadav)

7. CTM Technical Textiles Limited, Ahmedabad Shri Amit Agarwal 1/3

(Dr. Vihar V Rakhunde)

8. Department of Jute and Fibre Technology, Dr Swapan Kumar Ghosh 3/3

Institute of Jute Technology, (Prof A K Samanta)

University of Calcutta

9. FAD 17 Member Secretary 0/3

SL ORGANIZATION NAME OF THE REPRESENTATIVE ATTENDANCE

NO. REPRESENTED PRINCIPAL/(ALTERNATE)

10. Federation of Indian Chamber of Commerce & Shri Birju N Bhojani 0/3

Industry, New Delhi (Shri Vivek Prabhu)

11. Garware Technical Fibres Limited, Dist: Satara Dr Vijay Ramakrishnan 3/3

(Shri Sachin Kulkarni)

12. Horticulture Training Institute, Dist: Pune Shri Ravindra Deshmukh 0/3

(Shri Sampat Yadav)

13. ICAR-DRMR, Bharatpur Dr Pankaj Sharma 3/3

14. ICAR-National Institute of Natural Fibre Dr Surajit Sengupta 3/3

Engineering and Technology (NINFET), (Shri Manik Bhowmick)

Kolkata

15. Indian Agricultural Research Institute, Dr Manoj Khanna 3/3

New Delhi (Smt. Susama Sudhishri)

16. Indian Institute of Packaging, Mumbai Dr Tanweer Alam 1/3

(Shri Mahadeb Chakravarty)

17. Indian Jute Industries Research Association, Dr (Smt) Mahua Ghosh 3/3

Kolkata (Shri Debi Prasad Gon)

18. Indian Jute Mills Association, Kolkata Shri Samir Kumar Chandra 0/3

(Shri J K Behera)

19. Indian Technical Textile Association, Mumbai Dr Anup Rakshit 3/3

(Ms Ruchita Gupta)

20. Lamifab & Papers (P) Limited, Aurangabad Shri Kamlesh Dhoot 1/3

(Shri Kishorilal Dhoot)

21. Maha Seedsmen Association, Jalna Shri Satyanarayan B Rathi 0/3

(Shri Uddhav Manikrao Shirsath)

22. Maharashtra State Horticulture & Director 0/3

Medicinal Plant Board, Pune [Project Manager (PC & FP)]

SL ORGANIZATION NAME OF THE REPRESENTATIVE ATTENDANCE

NO. REPRESENTED PRINCIPAL/(ALTERNATE)

23. Mahatma Phule Krishi Vidyapeeth, Rahuri Dr S D Gorantiwar 0/3

Dist: Ahmednagar (Maharashtra) (Dr M S Mane)

24. National Bank for Agriculture and Smt Vinita singh 1/3

Rural Development , Mumbai Shri Sandeep sharma (alternate)

25. National Jute Board, Kolkata Shri M Dutta (alternate) 3/3

26. National Committee on Precision Applications Shri Anand Zambre 1/3

in Horticulture, Ministry of Agriculture & (Shri K K Kaushal)

Farmer Welfare

27. National Research Centre for Grapes, Pune Dr. D. S. Yadav 0/3

28. Office of Jute Commissioner, Kolkata Shri Somyadipta Datta 3/3

(Ms. Anusua Mukherjee)

29. Office of the Textile Commissioner, Mumbai Shri Sivakumar S 3/3

(Shri N K Singh)

30. Parry Enterprises India Limited, Bharuch Shri Noble Deivanayagam 2/3

(Shri Nikhil Jain)

31. Plastindia Foundation, Mumbai Shri Surender Choudhary 2/3

(Dr E Sundaresan)

32. Precision Farming Development Centre, Solan Dr. Ranjit Singh Spehia 0/3

33. Reliance Industries Limited, Mumbai Shri Sunil Mahajan 3/3

(Shri Shrichand Santani)

34. Rishi Techtex Limited, Mumbai Shri Dinesh Chandra Mehta 3/3

(Shri Mavji Savani)

35. Shri Ambica Polymer Pvt Ltd, Ahmedabad Smt Jyotika Nagri 3/3

(Shri Parth Nagri)

36. Shubham Sales, Dist: Valsad Shri Sanjay Lohiya 1/3

SL ORGANIZATION NAME OF THE REPRESENTATIVE ATTENDANCE

NO. REPRESENTED PRINCIPAL/(ALTERNATE)

37. Texel Industries Limted, Kalol Shri Shailesh R Mehta 2/3

(Shri Naresh R Mehta)

38. Textiles Committee, Mumbai Shri R Chandran 3/3

(Shri P N S Sivakumar)

39. The Bombay Textiles Research Association, Shri Prasanta Kumar Panda 1/3

Mumbai (Shri G R Mahajan)

40. The Synthetic & Art Silk Mills Research Smt Aswini Sudam 3/3

Association, Mumbai (Shri Premnath Surwase)

41. V K Packwell Pvt Limited, Kanpur Shri Vikesh Kumar Gupta 3/3

(Shri Sanjay Saxena)

**ANNEX 2**

**(***Item 3.1***)**

**SUMMARY OF ACTIONS TAKEN ON THE DECISIONS**

**TAKEN IN THE LAST MEETING**

|  |  |  |
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| **Item No.** | **Brief Description** | **Action Taken** |
| **2** | Certain modifications were suggested in the composition of the committee. | Updated composition of TXD 35 is given in **Annex 1.** |
| **4** | **DRAFT AMENDMEND TO INDIAN STANDARDS FOR FINALIZATION**  Draft Amendment No. 3to **IS 16190: 2014 Agrotextiles — High density polyethylene (HDPE) laminated woven lay flat tube for irrigation purpose — Specification** | Amendment No. 3 To IS 16190 is already published. |
| **5** | i) Agro Textiles —Bird Protection Nets for Agriculture and Horticulture Purposes Part 1 Knotted Bird Protection Nets | Indian standard has been published as IS 18310: 2023 (Part 1,2, &3) |
| ii) Agro Textiles —Bird Protection Nets for Agriculture and Horticulture Purposes Part 2 Knitted Bird Protection Nets |
| iii) Agro textiles – Specification for bird Protection Nets for Agriculture and Horticulture Purposes Part 3 Extruded Bird Protection Nets |
| iv) Tri-axial braided jute sapling bags | Working Draft is under prepration. |
| **6** | **COMMENTS RECEIVED ON PUBLISHED INDIAN STANDARDS**  Amendment no 1to **IS 16008 (Part 1): 2016** **Agro textiles – Shade nets for agriculture and horticulture purposes – Specification Part 1 Shade nets made from tape yarns (*first revision*)** | Amendment has been published. |
| Amendment no 1 to **IS 16008 (Part 2): 2016** **Agro textiles – Shade nets for agriculture and horticulture purposes – Specification Part 2 Shade nets made from mono filament yarns (*first revision*)** |
| **9** | **ANY OTHER BUSINESS**  Amendment no. 2 to **IS 16513 : 2016 Agro textiles – Insect Nets for Agriculture and Horticulture Purposes – Specification** | Amendment has been published. |
| Amendment no 1 to **IS 17730 (Part 1) : 2021 Agro-Textiles Hail Protection Nets for Agriculture and Horticulture Purposes Specification Part 1 Warp Knitted Hail Protection Nets** | Amendment has been published. |
| Amendment no 1 **IS 17730 (Part 2) : 2021 Agro-Textiles Hail Protection Nets for Agriculture and Horticulture Purposes Specification Part 2 Woven Hail Protection Nets** | Amendment has been published. |

**ANNEX 3**

**(***Item 4.1***)**

**TERMS OF REFERENCE FOR THE R&D PROJECTS**

**1. Title of the project: —** To formulate draft revision of IS 16202 :2014 *Agro Textiles —*

*Woven Ground Covers for Horticulture Application — Specification*

**2. Background:**

a) **Technical Committee:** TXD 35Technical Textiles for Agrotech Applicationssectional committee under Textile Division council.

b) Review of IS 16202 :2014 *Agro Textiles — Woven Ground Covers for Horticulture Application — Specification*

c) One of the key practices in modern horticulture is the use of woven ground cover mulches to enhance crop yields, conserve soil moisture, and suppress weed growth. These mulches come in a variety of types, distinguished by their GSM and deniers.

Given this growing demand, and diverse applications, it becomes essential to revise the existing Indian standard IS 16202: 2014 *Agro Textiles — Woven Ground Covers for Horticulture Application — Specification* for inclusion of the material (such as polypropylene, nylon, polyamide,), dimensions, denier etc and other functional and performance requirements for various types of woven ground covers. These specifications not only assist manufacturers in producing high-quality woven ground covers but also provide users with a reliable product contributing to elevating the quality of locally manufactured woven ground covers to meet international standards.

**3**. **Scope**: To study and identify different variety of woven mulches used for suppression of weed based on their different GSM with minimum of 100 g/mt2 and above.

The project aims to bring out a comprehensive Indian standard on woven ground covers for horticulture applications which includes all the different varieties available in current commercial market scenario supported by technical information, scientific data, inhouse test report/third party report.

The project involves generation and collection of technical data for raw material, general requirement, specific requirement etc for all the different varieties for woven ground cover including multiple GSMs, raw materials (HDPE, PE, Nylon etc), deniers and EPcm and PPcm.

**4. Expected Deliverables**:

1. To identify all the varieties of woven mulches used in horticulture applications.
2. Collecting the sample of various varieties of woven mulches available in the market.
3. Generating the empirical data for various relevant requirement like GSM, Deniers etc. for the various varieties of woven mulches samples collected from at least 2 labs.
4. Compiling the data generated for the revision of the Indian standard.

**5. Research Methodology**:

1. To collect the available data for the performance requirements of woven mulches through desktop study, books, magazines, national and international standards information available with manufactures, laboratories, academia or any other source. Identifying the stakeholders, including manufacturer, Laboratories, etc. for woven mulches to collect data on all the varying varieties and their functional and performance parameters.
2. To purchase/collect the sample of each variety of woven mulches and carry out tests from at least 2 BIS recognized Lab/NABL Accredited lab or industry facilities equipped with the necessary capabilities for the performance and functional requirement(s) either using Indian Standard/ISO International standards or those specified by the manufacturer on the product labelling. These results are to be tabulated and examined to determine the final values which has to be incorporated in the standard for the inclusion of varieties.
3. Visiting of mulch manufacturing industries (Large, Medium and small scale) and testing labs to collect information, regarding raw materials, varieties, performance parameters, manufacturing and packaging practices, sampling and testing methods or any other important requirement of woven mulches (if required).
4. Review and revise the specification of Indian standard (as per IS 12) based on the collected data, ensuring that they align with international quality benchmarks, meet user expectation and industry norms.

**6. Requirement for the CVs:**

Graduate in Textile Technology/Textile Engineering with minimum 5 years of working experience in testing or manufacturing of Agrotextiles.

**7. Timeline and Method of Progress Review:**

|  |  |
| --- | --- |
| **Time line** | **Method of progress** |
| 0 to 45 days | Identifying the various varieties of woven mulches being manufactured/being used by users/manufactures. Collect the sample of each prevalent verity for the evaluation of empirical data helps in guiding the revision of Indian standard.  To purchase/collect the sample of each of the identified varieties of woven mulches. |
| 45 to 90 days | Carry out tests from BIS recognized Lab/NABL Accredited lab or industry facilities.  Visiting of woven mulch manufacturing industries (Large, Medium and small scale) and testing labs to collect information. |
| 90 to 135 days | Examining the results of samples tested and compiling the data. |
| 135 to 180 days | Consolidation of data, Submission of draft revision of Indian standard of the project. |

**8. Support BIS will Provide:**

BIS will provide Indian Standards/ISO standards, if any desired during the project timeline.