



CSAM



# The Work of ANTAM Technical Working Groups (TWGs) 2017

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# Power Tillers 001-2016 Feedbacks from Member Countries

- ❖ Russia proposed to include the Reliability Test
- ❖ India proposed the following tests to be included in the Code: High Ambient Test; Ten-hour Test; Rotary Shaft Test Under High Ambient Condition; Air Cleaner Oil Pull-Over Test; Vibration Measurement; Noise Measurement (at by-stander position); Field Test (in dry land); and, Component/Assembly Inspection
- ❖ Japan proposed to include Safety Requirements

# Power Tillers Major Changes

- ❖ Revised the text of the draft Code following suggestions from India and Japan. Specifically, substantive changes were made to technical wording to provide users with clearer definition.
- ❖ Based on the comments received by the focal point in Japan, the group conducted extensive discussions to address all major concerns and provide written feedbacks. A specific section related to safety requirement was added to the Code.

# Power Tillers Major Changes

- ❖ Based on the suggestions of India, the high ambient test has been included as an optional test with related text and table to collect data.
- ❖ The test report has been modified to reflect the changes in the Code while the parts related to vibration and noise test have been improved with addition of more details.
- ❖ In order to facilitate end-users involvement in machinery selection a simplified test report has been developed

# Power Tillers Major Challenges

- ❖ Environal impact of the Code to highlight how the work of ANTAM contributes to control emissions in agriculture i.e. to provide any modifications that could enhance the environmental performance of the machine.

# Power Knapsack Misters- Cum-Dusters ANTAM 002-2016 Feedbacks from Member Countries

- ❖ Between March and May the TWG on Knapsack Misters-Cum-Dusters held six (6) rounds of online technical consultations and in which technical suggestions and comments during the ANTAM 3<sup>rd</sup> Annual meeting were discussed.

# Power Knapsack Misters- Cum-Dusters ANTAM 002-2016 Feedbacks from Member Countries

- ❖ France proposed to add a second methodology to test deposition. Specifically the spray range and width test are currently conducted while weighing a certain amount of water collected on a 2D sampling area of petri dishes. Considering some potentially very dry atmospheric conditions in some Asia Pacific areas, evaporation might occur that would bring a bias amount. Thus it was suggested to add an alternative method based on the recovery of a dye tracer. Also they proposed for the addition of vertical range parameters.

# Power Knapsack Misters- Cum-Dusters ANTAM 002-2016 Feedbacks from Member Countries

- ❖ Russia proposed to add a new chapter on terminology.
- ❖ Vietnam proposed to include center of gravity determination test



# Power Knapsack Misters- Cum-Dusters Major Changes 002-2017

- ❖ The number of the test samples to be submitted by the applicants reduced to at least three (3) from at least five (5) of the 002-2016.
- ❖ Inclusion of Terminology to align the structure of all ANTAM codes.
- ❖ Addition, net weight of the sprayer without liquid/dust is 11.0 kg.
- ❖ The Tank capacity requirement was changed to 20.0 L maximum from 10 L Minimum of the 002-2016.
- ❖ A Maximum Allowable Noise level of 95db(A) was added for safety purposes and the manufacturers are now required to provide ear protectors along with the machine.
- ❖ The items Noise level and vibration tests were separated.

# Power Knapsack Misters- Cum-Dusters Major Challenges 002-2017

1. Member countries government laws and policies on mechanization.
2. Uniformity of Code application in member countries, to include budget, facilities, trained personnel, and other small things.
3. Low level of Mister-Cum-Dusters users in some member countries like the Philippines.

# Paddy Transplanters ANTAM 003-2017 Summary of Work in 2017

- ❖ The Technical Working Group for the Paddy Transplanters :
  - Mr. Anuradha Wijethunga
  - Dr. Md. Anwar Hossen
  - Dr. Isara Chaorakam
  - Dr. Allimuthu Surendrakumar
  - Dr. Joko Pitoyo
  - Mr. Takashi Fujimori
  - Mr. Mohd Sharil Shah Bin Mohamad Ghazali
  - Mr. Erol Akdemir
  - Mr. Ngo Van Phuong
  - Mr. Romulo E. Eusebio
  - Sri Lanka, Chair
  - Bangladesh
  - Thailand
  - India
  - Indonesia
  - Japan
  - Malaysia
  - Turkey
  - Vietnam
  - Philippines

# Paddy Transplanters ANTAM 003-2017 Summary of Work in 2017

- ❖ From March to May, 2017, the TWG on Paddy Transplanters held nine (9) rounds of online technical negotiations. Discussion started on the outstanding issues remained unresolved during the 2016 negotiations.
- ❖ The TWG discussed more on the safety aspects of the transplanter.
- ❖ Japan sent comments and proposals for the codes for the TWG to discuss with.

# Paddy Transplanters ANTAM 003-2017 Summary of Work in 2017

Finally during the TWG meeting in Dhaka, Bangladesh, the TWG agreed on the following:

- ❖ Finalized the Terminology used in the code.
- ❖ defined the content of the Operations manuals.
- ❖ Described the procedures to check dimensions and the material of the main parts.
- ❖ For the specifications of the mechanism, the group focused on power transmission, transplanting, and floating mechanisms.
- ❖ The group agreed on 12 safety protection items and two (2) safety performance tests such as Parking brake test and operator's ear level noise measurement test.

# Paddy Transplanters ANTAM 003-2017 Summary of Work in 2017

The agreed Performance test includes:

- ❖ General description of the Test
- ❖ Field Conditions (Size and shape)
- ❖ Seedlings conditions
- ❖ Transplanter Performance
  - Specifies all data to be gathered during the test
  - With related formulas to be used for calculations
  - Transplanting pattern
  - Sampling methodology
  - Number of samples/readings to be taken for each data

# Paddy Transplanters ANTAM 003-2017 Summary of Work in 2017

- ❖ During the TWG meeting in Dhaka, Bangladesh, the TWG left an important concern on the Paddy Transplanter Code, that is the ENDURANCE TEST. Going to the last part of the activities, the procedure for Endurance Test was discussed by the group. However, still no concrete agreement was made.

# ANTAM 001- 2017

ANTAM Code 001-2017 was formulated by referring to relevant ISO and OECD standards and merged with relevant national standards from China, India, Indonesia, Philippines, and Thailand to reflect unique local conditions.

- Checking of Specifications
- Engine Performance Test
- Rotary Shaft Performance
- Vibration Measurement Test
- Drawbar Performance Test
- Turning Ability Test
- Parking Brake Test
- Noise Measurement Test
- Water Proof Test
- Safety Requirements



# ANTAM 002-2017

ANTAM Code 002-2017 is formulated by referring to relevant ISO and American standards and merged with relevant national standards from China, India, and Vietnam.

It includes the following tests:

- ❖ Checking of Specifications
- ❖ Engine Test
- ❖ Joints, Tank, Straps, Hose and Controls Test
- ❖ Blower Test
- ❖ Discharge Rate Test
- ❖ Misting / Dusting Range and Width Test
- ❖ Measurement of Droplet size and Droplet density
- ❖ Noise Test
- ❖ Vibration Test
- ❖ Endurance Test

# ANTAM 003-2017

ANTAM Code 003-2017 is formulated by referring to ANTAM Standards 001-2016 and 002-2016, standards developed by International Organization for Standardization (ISO), Regional Network for Agricultural Machinery (RNAM), and by merging with relevant national standards from China, India, and Japan to reflect unique regional conditions.

It includes the following tests:

- ❖ Checking of Specifications
- ❖ Engine Test
- ❖ Joints, Tank, Straps, Hose and Controls Test
- ❖ Blower Test
- ❖ Discharge Rate Test
- ❖ Misting / Dusting Range and Width Test
- ❖ Measurement of Droplet size and Droplet density
- ❖ Noise Test
- ❖ Vibration Test
- ❖ Endurance Test

# Our Targets for 2018

- ❖ Second edition of ANTAM 003
- ❖ Implementation of 001-2017 and 002-2017
- ❖ Analysis of round robin tests results
- ❖ Determine the years of validity of the certificate
- ❖ Work on the official list of technical requirements for ANTAM accredited testing stations

# Thank you

