

व्यावसायिक परीक्षण रिपोर्ट (प्रारंभिक)
COMMERCIAL TEST REPORT
(INITIAL)

संख्या / No: Machine-288/1034
Month: July, 2019
Validity: 30.06.2024



**MAHINDRA MP 461 SELF PROPELLED
WALK BEHIND RICE TRANSPLANTER**



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Government of India

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Ministry of Agriculture and Farmers Welfare

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Department of Agriculture, Cooperation and Farmers Welfare

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Southern Region Farm Machinery Training and Testing Institute

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(□□. □□□.)

Tractor Nagar, Garladinne- 515 731, District: Anantapur (A.P.)

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Machine- 288/1034	MAHINDRA MP 461 SELF PROPELLED WALK BEHIND RICE TRANSPLANTER	COMMERCIAL (ICT)
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Manufacturer : M/s. Mahindra and Mahindra Ltd.,
Tractor Plant, Mahindra Nagar,
Zaheerabad, Dist. – Sangareddy,
Telangana – 502 220, India.

Applicant : M/s. Mahindra and Mahindra Ltd.,
Mahindra Applitrac R & D, A-29E-
Phase, Industrial Area, SAS Nagar,
Mohali – 160 055, Punjab, India.

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TRANSPLANTER**

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16.2 Field Test

The transplanter was operated in varying field conditions for a total period of 26.0 hours for transplanting Sampada Swarna -1208 variety of paddy seedlings. The results are summarized as under:-

- Av. forward speed of operation was observed as 2.68 to 2.75 kmph.
- Av. area covered was recorded as 0.212 to 0.234 ha/h.
- Av. depth of transplanting was recorded as 3.6 to 4.3 cm.
- The spacing between rows was recorded as 30 cm.
- Av. number of plants per hill was recorded as 4 to 6.
- Av. hill spacing was recorded as 17.9 to 18 cm.
- Av. total number of hills in 5 m row length was recorded as 29.
- Av. number of hills per sq. m. was recorded as 24.
- Av. percentage of missed hills was recorded as nil to 0.83.
- Av. percentage of floating seedlings was recorded as nil to 0.83.
- Av. percentage of buried seedlings were recorded as nil to 0.83.
- Av. percentage of damaged seedling were recorded as nil to 0.83.
- The total percentage of transplanting faults was recorded as 0.83 to 2.49.
- The consumption of nursery trays was recorded as 190 to 208 numbers per hectare.
- The hourly fuel consumption was recorded as 0.886 to 0.997 l/h and fuel required for planting of one hectare area was recorded as 4.03 to 4.41.

16.2.1 The quality of work was observed as smooth during entire transplanting operation. The overall performance of the machine was found satisfactory.

16.3 Components/assembly inspection

16.3.1 The transplanter and engine were dismantled after 40.96 hours of operation and wear of critical components were observed within the limits.

16.3.2 The main gear box, planting box, planting arm drive mechanism and bearings were dismantled after completion of field operation and found in satisfactory working condition.

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16.4 Safety provisions

The machine is provided with various safety provisions while working in the field or moving on the road as mentioned in the **clause 5.10** of this test report.

16.5 Technical literature:

Operator's manual, service manual cum parts catalogue of Rice Transplanter and service manual of engine in separate booklets were supplied with the Rice Transplanter for reference during the test. It is however, recommended that same may be revised in Hindi and other regional languages as per IS 8132 : 1999 (Reaffirmed 2004) for the sake of user & technical personnel.

TESTING AUTHORITY:

B.N. DIXIT AGRICULTURAL ENGINEER	
Dr. P.P. RAO DIRECTOR	

17. APPLICANT'S COMMENTS

"There is no specific comment was received from the applicant".