

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

संख्या / No: Machine-333/1132  
माह / Month: March, 2020  
Validity: 28.02.2025



**GODABARI AGRO MACHINERY 2ZS-4 SELF PROPELLED  
WALK BEHIND RICE TRANSPLANTER**



भारत सरकार

Government of India

कृषि एवं किसान कल्याण मंत्रालय

Ministry of Agriculture and Farmers Welfare

कृषि, सहकारिता एवं किसान कल्याण विभाग

Department of Agriculture, Cooperation and Farmers Welfare

दक्षिणी क्षेत्र कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान

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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<b>Machine-333/1132</b>	<b>GODABARI AGRO MACHINERY 2ZS-4 SELF PROPELLED WALK BEHIND RICE TRANSPLANTER</b>	<b>COMMERCIAL (ICT)</b>
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Manufacturer : M/s. Jiangsu World High-Tech Agricultural Equipment Co. Ltd., No. 55, Guangyuan Road, Dantu - Industrial Zone, Zhenjilang, Jiangsu - 214 028, **China**

Applicant : M/s. Godabari Agro Machinery and Services India Private Limited, 2<sup>nd</sup> Floor, "BIPRA SITA", Plot No. 434/5627, Lewis Road, Nageswar Tangi, Bhubaneswar Odisha - 751 002, India.

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## **16 SUMMARY OF OBSERVATIONS, COMMENTS AND RECOMMENDATIONS**

### **16.1 Engine Performance:**

- 16.1.1 The maximum power and rated power were observed as 3.3 & 2.5 kW under natural ambient condition against the declared value of 4.0 & 3.3 kW respectively.
- 16.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 342 g/kWh against the declared value of 400 g/kWh.
- 16.1.3 Max. torque was observed as 10.5 Nm against the declared value of 10.5 Nm.
- 16.1.4 Back up torque of engine was observed as 9.72 %, against the declared value of 17%. this should be looked into for corrective action.

### **16.2 Field Test**

The transplanter was operated in varying field conditions for a total period of 26.0 hours for transplanting MTU-1121 variety of paddy seedlings. The results are summarized as under:-

- Av. forward speed of operation was observed as 2.89 to 3.04 kmph.
- Av. area covered was recorded as 0.237 to 0.265 ha/h.
- Av. depth of transplanting was recorded as 3.9 to 4.3 cm.
- The spacing between rows was recorded as 30 cm.
- Av. number of plants per hill was recorded as 5 to 6.
- Av. spacing between hills was recorded as 13.8 to 14 cm.
- Av. total number of hills in 5 m row length was recorded as 36.
- Av. number of hills per sq. m. was recorded as 28.
- Av. percentage of missed hills was recorded as nil to 0.71.
- Av. percentage of floating seedlings was recorded as nil to 0.71.
- Av. percentage of buried seedlings were recorded as Nil to 0.71.
- Av. percentage of damaged seedling were recorded as Nil to 0.71.
- The total percentage of transplanting faults was recorded as 0.71 to 1.42.
- The consumption of nursery trays was recorded as 205 to 220 numbers per hectare.
- The hourly fuel consumption was recorded as 0.93 to 1.10 l/h and fuel required for planting of one hectare area was recorded as 3.51 to 4.64.



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**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 unit and engine were dismantled after 40.0 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 and further also found that there is no ingress of water and/or mud against the sealings provided.

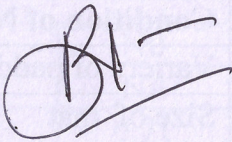
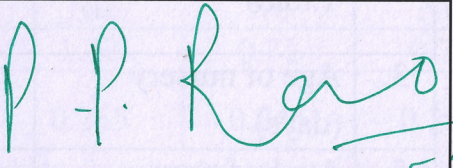
**16.4 Safety provisions**

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:**

Operation manual, maintenance manual, parts manual of engine and parts catalogue were supplied with the Rice Transplanter for reference during the test. It is however, recommended that same and engine manual also 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**

Para No.	Our reference	Applicant's comments
17.1	16.1.4	We will inform to our principle supplier regarding this matter
17.2	16.5	In future, we will make literature as per your recommendations.