# व्यावसायिक परीक्षण रिपोर्ट (प्रथमबैच) COMMERCIAL TEST REPORT (1st Batch)

संख्या/No: Machine-732/1834 माह/Month: February, 2025

THIS TESTREPORT IS VALID UPTO 31.01.2034



## KAVI, HT 135F JE POWER WEEDER



भारत सरकार

Government of India

कृषिएवं किसान कल्याण मंत्रालय

Ministry of Agriculture and Farmers Welfare

कृषिएवं किसान कल्याण विभाग

Department of Agriculture and Farmers Welfare

दक्षिणी क्षेत्र कृषि मशीनरी प्रशिक्षण एवं परीक्षण संस्थान

Southern Region Farm Machinery Training and Testing Institute

ट्रैक्टर नगर, गार्लिदिन्ने-515 731, जिला: अनंतपुर (आं. प्र.) Tractor Nagar, Garladinne-515 731, District: Anantapur (A.P.)

[An ISO 9001:2015CERTIFIEDINSTITUTE]

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COMMERCIAL (1st Batch)

Manufacturer, (apa)

: M/s. Chongqing Huitian Machinery Manufacturing Co. Ltd., No. 55, North Tongtao Road, Taojia Town, Jiu Longpo District, Chongqing, P.C. 401 382, China.

Applicant

: M/s. Kavi Agro Agency, 164, Kumaran Road, Sangiliyandapuram, Trichy - 620 001, Tamil Nadu.

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## KAVI, HT 135F JE POWER WEEDER

THIS TEST REPORT IS VALID UP TO 31.01.2034

COMMERCIAL (1st Batch)

Type of test

: COMMERCIAL (1st Batch)

Period of test

: November, 2024 to January, 2025

Test Report No.

: Machine-732/1834

Month / Year of release

February, 2025

- i) The results reported in this report are observed values and no corrections have been applied for atmospheric and site conditions.
- ii) The data given in this report pertain to the particular machine randomly selected by testing authority through virtual mode.
- iii) The results presented in this report do not, in any way, attribute to the durability of the machine.
- iv) This Test Report should not be reproduced in part or full without prior permission of the Director, Southern Region Farm Machinery Training & Testing Institute, Garladinne, Anantapur (A.P.).
- v) This is the first batch test report and therefore, should be read in conjunction with the test report of base model i.e. "KAVI, HT 135F JE POWER WEEDER" which was tested under Initial commercial testing vide test report no Machine-200/799, released in October, 2017. This report is valid up to 31.01.2034, Vide Ministry's O.M. No. 13-22/2020-M&T (I&P) dated 12.12.2023.

#### SELECTED CONVERSIONS

S. No.	Units	<b>Conversion Factor</b>
1	Force	
	1 kgf	9.80665 N
		2.20462 lbf
2	Power	Coverance
	1 hp	1.01387 metric hp (Ps)
	series has er	745.7 W
	1 Ps	735.5 W
	1 kW	1.35962 Ps
3	Pressure	
	1 psi	6.895 kPa
	1 kgf/cm <sup>2</sup>	98.067 kPa = 735.56 mm of Hg
	1 bar	$100 \text{ kPa} = 10 \text{ N/cm}^2$
	1 mm of Hg	1.3332 m-bar

### KAVI, HT 135F JE POWER WEEDER

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COMMERCIAL (1st Batch)

19. COMMENTS & RECOMMENDATIONS

19.1

## **Engine Performance:**

- 19.1.1 The maximum power was observed as 6.53 kW under natural ambient condition against the declared value of 6.4 kW.
- 19.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 282 g/kWh against the declared value of 320 g/kWh.
- 19.1.3 Back up torque of engine was observed as 10.32 % against declared value of 10 %.
- 19.1.4 Max. torque was observed as 22.87 Nm against the declared value of 22.5 Nm.

## 19.2 Mechanical vibration:

The amplitude of mechanical vibration on various assemblies of the Power weeder was observed to the extent of 391 micron, which is on higher side. In view of the above, this should be given top priority for corrective action.

#### 19.3 Hardness & chemical:

The hardness& chemical of rotary blades does not conform to the requirement of IS 6690:1981 (Reaffirmed 2022). This should be looked into for corrective action.

## 19.4 Marking /labeling:

The labeling plate does not reveal all the required information. It is therefore recommended that a suitable labeling plate covering all essential components, interlaid, the following must be provided:

- i) Address of the manufacturer
- ii) Country of origin
- iii) Specific fuel consumption (g/kWh)

#### 19.5 Technical literature:

Operators manual and parts catalogue of power weeder were supplied with test sample for reference during the test. It is however, recommended that same may be revised and brought out in Hindi & other regional languages as per IS 8132:1999 (Reaffirmed 2019) for the sake of user & technical personnel in booklet form.

## KAVI, HT 135F JE POWER WEEDER

THIS TEST REPORT IS VALID UP TO 31.01.2034

COMMERCIAL (1st Batch)

**TESTING AUTHORITY** 

Er. PRAMOD YADAV

AGRICULTURAL ENGINEER

Er. VIJAY KUMAR BADAYA SENIOR AGRICULTURAL ENGINEER

Dr. B.M. NANDEDE DIRECTOR

20. APPLICANT'S COMMENTS

-NIL-