



**KAVI-95 POWER WEEDER**



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- 324/1099</b>	<b>KAVI-95 POWER WEEDER</b>	<b>COMMERCIAL (ICT)</b>
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Manufacturer : M/s. Chongqing Wanggeng  
Machinery Co. Ltd., Silong Village,  
Huilongba Town, Shapingba District,  
Chongqing City, **China**

Applicant : M/s. Kavi Agro Agency,  
164, Kumaran Road,  
Sangiliyandapuram Main Road,  
Trichy-620001, Tamil Nadu, **India**

#### KAVI-95 POWER WEEDER

Report No. : Machine-324/1099 Month: December

Year: 2019



**Government of India**  
**Ministry of Agriculture and Farmers Welfare**  
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## 17. COMMENTS & RECOMMENDATIONS

### 17.1 Engine Performance:

- 17.1.1 The maximum power and rated power were observed as 3.9 kW under natural ambient condition against the declared value of 4.0 kW.
- 17.1.2 Specific fuel consumption of engine corresponding to maximum power was recorded as 302 g/kWh against the declared value of 380 g/kWh.
- 17.1.3 Max. Torque was observed as 11.9 Nm against the declared value of 16 Nm. This should be looked into for corrective action.
- 17.1.4 Back up torque of engine was observed as 6.25 %, against the declared value of 10%. This should be looked into for corrective action.
- 17.1.5 **During varying speed test of engine at both natural & high ambient conditions after attaining max. torque at 11.9 Nm & 11.2 Nm respectively, while further loading, sudden drop of engine speed and thick black smoke was noticed.**
- 17.2 Max. Noise at operator's ear level was observed as 86 dB (A).
- 17.3 The amplitude of mechanical vibration on most of the assemblies of the Power Weeder was observed on higher side and upto the maximum extent of 410 microns, Which is directly concerned with Operator's Health, Safety and Comfort. Besides, it also adversely affect the useful life of the components. In view of the above, this should be taken care for corrective action.
- 17.4 The hardness of rotary blades does not conform to the requirement of IS 6690:1981 (Reaffirmed 2012). This should be looked into for corrective action.

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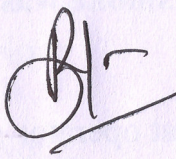

17.5 Chemical composition of rotor blades does not conform to the requirement of IS 6690:1981 (reaffirmed 2012). This should be looked into for corrective action.

17.6 The provided labeling plate should be as per the requirement of IS.

#### 17.7 Technical literature:

The Operation manual cum parts catalogue of power weeder and engine were supplied with the test sample for reference during the test. It is, however, recommended that same may be revised and bought out in Hindi & 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	

#### 18. APPLICANT'S COMMENTS

We have gone through the comments on the test report and in the connection we write this to inform you that we will take up the matter with our supplier Chongqing Wanggeng Machinery Co. Ltd., Chongqing, China for necessary corrective measures.