

TEST REPORT

of the Julius Kühn-Institut Federal Research Institute for Cultivated Plants, Braunschweig



Double - Flatfan nozzle TeeJet TTI60-110 04 VP-C (Plastic, red)

Approved for spraying field crops

Applicant TeeJet Technologies GmbH Eglosheimer Str. 41 71636 Ludwigsburg Manufacturer Spraying Systems Co. North Ave at Schmale Rd. Wheaton, IL (USA) Approved on 5 January 2017

Assessment

The double-flatfan nozzle TeeJet TTI60-110 04 VP-C (Plastic, red) was tested without accessory. The nozzle is suitable for spraying field crops, provided that the following technical requirements are fulfilled:

- 1. Installation in a spray boom with a sufficient and a steady amount of liquid flow,
- 2. 500 mm nozzle spacing,
- 3. 50 cm between nozzles and spray target (consistency of eveness of cross distribution proved satisfactory at a distance range from 40 cm to 60 cm),
- 4. Spray pressure measured in front of the nozzle between 1.5 and 7.0 bar; liquid volume flow per nozzle as stated in table below.

Suitable precautions should be taken to assure that the nozzles do not get blocked up or drip when in use. The colour coding of the nozzle tip comply with standard ISO 10625. For the application of field edges. TeeJet recommends the use of the nozzle AIUB 85 03 VS as last nozzle in the spray boom.

Pressure	Liquid flow volume	Max. deviation of	Evenness of cross	Droplet spectrum
(bar)	without accessories	single nozzle flow from	distribution at (cm)	(BCPC-Standard)
	(l/min)	the dosage tables	40 / 50 / 60	
			(Vk %)	
1.5	1.13	- 4.37 %	1.4 / 5.5 / 5.9	very coarse
2.0	1.30	-	- / 5.2 / -	very coarse
3.0	1.59	4.18 %	- / 1.6 / -	very coarse
4.0	1.84	3.45 %	1.4 / 3.2 / 1.7	very coarse
5.0	2.06	-	-/2.4/-	very coarse
6.0	2.26	-	- / - / -	very coarse
7.0	2.44	- 3.80 %	- / 1.7 / -	very coarse

Loss reducing properties

Included in the list "Loss reducing equipment" (as of 12 March 2018)

Drift reducing classification	Type of equipment and drift reducing parts	Regulations for use
50 %	Fieldsprayer with nozzle TeeJet TTI60 110-04 VP-C	First 20 m from field edge spraying with max. 6.0 bar, nozzle height above target 50 cm
75 %	Fieldsprayer with nozzle TeeJet TTI60 110-04 VP-C	First 20 m from field edge spraying with max. 4.0 bar, nozzle height above target 50 cm
90 %	Fieldsprayer with nozzle TeeJet TTI60 110-04 VP-C	First 20 m from field edge spraying with max. 3.0 bar, nozzle height above target 50 cm

Field test

The nozzles were used in the year 2016 on a total of 3541 hectares, a sufficient effect of the plant protective measures was confirmed.

Basics for testing

The tests were carried out on basis of the Regulations for Testing Plant Protection Equipment (Guideline 2-1.1:2013) and of ISO 5682-1:1999. The requirements of ISO 16119-2:2013 and of JKI-Guideline 1-2.1:2013 were fulfilled.

<u>Field testing:</u> Thüringer Landesanstalt für Landwirtschaft Referat 410 - Pflanzenschutz Apoldaer Straße 4 07774 Dornburg-Camburg Technical testing: Institut für Anwendungstechnik im Pflanzenschutz des Julius Kühn-Instituts, Messeweg 11-12, 38104 Braunschweig © JKI, August 2017