TEST REPORT

of the

Julius Kühn-Institut

Federal Research Institute
for Cultivated Plants, Braunschweig

Mixed nozzle assembly comprising of TeeJet TTJ60 – 110 04 VP (Certification number G 1771) and 6 x nozzle TeeJet TURBO TEEJET 110 04 VP (Certification number G 1527) used in the section behind the sprayer to prevent the unintended spraying of sprayer parts

Approved for spraying field crops

Manufacturer
Spraying Systems Co.
North Ave at Schmale Rd.
Wheaton, IL (USA)

Applicant
TeeJet Technologies
Königsallee 57
71638 Ludwigsburg

Approved on
25 March 2013

Institut for Application Technique in Plant Protection DOI: 10.5073/AT.2014.G1955
Messeweg 11-12, 38104 Braunschweig - GERMANY

Assessment

Mixed assembly consisting of the nozzle TeeJet TTJ60 – 110 04 VP (plastic, red) combined with six nozzles TeeJet TURBO TEEJET 110 04 VP (plastic, red) used in the section behind the sprayer to prevent unintended spraying of sprayer parts. The nozzle set was tested without additional accessories and 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 1.0 and 6.0 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 dimensions of the nozzle tip comply with standard ISO 8169. The colour coding of the nozzle tip complies with standard ISO 10625. The nozzle TURBO TEEJET 110 04 VP must be placed in the section behind the sprayer to prevent unintended spraying of sprayer parts.

Pressure (bar)	Liquid flow volume without accessories (l/min)	Max. deviation of single nozzle flow from the dosage tables	Evenness of cross distribution at (cm) 40 / 50 / 60 (Vk %)	Droplet spectrum (BCPC-Standard)
1.0	0.92	4.65 %	4.2 / 4.3 / 4.2	very coarse
2.0	1.30	-	- / - / -	coarse
3.0	1.60	4.43 %	- / 4.1 / -	coarse
4.0	1.84	4.57 %	4.6 / 4.6 / 5.3	coarse
5.0	2.06	-	- / - / -	medium
6.0	2.25	4.93 %	- / 5.4 / -	medium

Basics for testing

The tests were carried out on basis of the Regulations for Testing Plant Protection Equipment (Guideline 1-2.3.1:1999) and of ISO 5682-1:1999. The requirements of EN 12761-2:2002 and of JKI-Guideline 1-2.1:2004 were fulfilled.

Field testing:

-

Technical testing:

Institut für Anwendungstechnik im Pflanzenschutz des
Julius Kühn-Instituts,
Messeweg 11-12,
38104 Braunschweig