TEST REPORT



Julius Kühn-Institut

Federal Research Institute for Cultivated Plants, Braunschweig



Flatfan nozzle Agrotop TurboDrop TD 80-015

Approved for spraying field crops with 250 mm nozzle spacing

Applicant and ManufacturerAgrotop GmbH
Köferinger Str. 5
93083 Obertraubling-Gebelkofen

Approved on 15 January 2015

Assessment

The flatfan nozzle Agrotop TurboDrop TD 80-015 (Ceramics, plastic-coated, green) was tested without accessories. 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. 250 mm nozzle spacing,
- 3. 40 cm between nozzles and spray target (consistency of eveness of cross distribution proved satisfactory at a distance range from 30 cm to 50 cm),
- 4. Spray pressure measured in front of the nozzle between 4.0 and 8.0 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 comply with standard ISO 10625. The nozzle tip is fitted with a moulded bajonett cap (System "TeeJet"). In the field edge region the last nozzle of the spray line must be closed to prevent an overspraying.

Pressure (bar)	Liquid flow volume without accessories (I/min)	Max. deviation of single nozzle flow from the dosage tables	Evenness of cross distribution at (cm) 30 / 40 / 50 (Vk %)	Droplet spectrum (BCPC-Standard)
4.0	0.69	- 4.22 %	4.2 / 6.5 / 4.7	coarse
5.0	0.77	-	3.8 / 6.9 / -	coarse
6.0	0.84	- 4.47 %	2.6 / 6.4 / -	coarse
7.0	0.91	-	-/-/-	coarse
8.0	0.97	- 4.55 %	2.5 / 4.8 / -	coarse

Field test

The nozzles were used in the year 2013 on a total of 3010 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 EN 16119-2:2013 and of JKI-Guideline 1-2.1:2013 were fulfilled.

Field testing:

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