



# TEST REPORT

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



**Offcenter flatfan nozzle Agrotop AirMix OC 80-04  
(plastic, red) in combination with Agrotop AirMix 110-05 or Agrotop  
TurboDrop HiSpeed 110-05 or ALBUZ CVI Twin 110-05**

**Approved for spraying field crops  
used at the end of the spray boom**

**Applicant and Manufacturer**  
Agrotop GmbH  
Köferinger Strasse 5  
93083 Obertraubling-Gebelkofen

**Approved on**  
**6 January 2011**  
**Extension of approval**  
**15 January 2015**

## Assessment

The offcenter flatfan nozzle Agrotop AirMix OC 80-04 (plastic, red) was tested without accessories. The nozzle is suitable for spraying field crops, provided that the following technical requirements are fulfilled:

1. Usage of the nozzle at the end of the spray boom in combination with Agrotop AirMix 110-05 or Agrotop TurboDrop HiSpeed 110-05 or ALBUZ CVI Twin 110-05,
2. Installation in a spray boom with a sufficient and a steady amount of liquid flow,
3. 500 mm nozzle spacing,
4. 50 cm between nozzles and spray target (consistency of evenness of cross distribution proved satisfactory at a distance range from 40 cm to 60 cm),
5. Spray pressure – measured in front of the nozzle – between 1.0 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 dimensions of the nozzle tip comply with standard ISO 8169. The colour coding complies with standard ISO 10625.

Pressure (bar)	Liquid flow volume without accessories (l/min)	Max. deviation of single nozzle flow from the dosage tables	Droplet spectrum (BCPC-Standard)
1.0	0.94	4.85 %	very coarse
2.0	1,33	-	very coarse
3.0	1.63	3.31 %	very coarse
4.0	1.88	-	coarse
5.0	2.10	-	coarse
6.0	2.30	2.21 %	coarse
7.0	2.49	-	-
8.0	2.66	2.47 %	-

## Basics for testing

The tests were carried out on basis of the Regulations for Testing Plant Protection Equipment (JKI-Guideline 1-2.3.1:2008) and of ISO 5682-1:1999. The requirements of EN 12761-2:2002 and of JKI-Guideline 1-2.1:2010 were fulfilled.

Loss reducing properties

Included in the list „Loss reducing equipment“ (as of 23 March 2015)

Drift reducing classification	Type of equipment and drift reducing parts	Regulations for use
50 %	Fieldsprayers with Agrotop AirMix 110-05 in combination with Agrotop AirMix OC 04	First 20 m from field edge, nozzle height above target 50 cm
50 %	Fieldsprayers with Agrotop TurboDrop HiSpeed 110-05 in combination with Agrotop AirMix OC 04	First 20 m from field edge, nozzle height above target 50 cm
75 %	Fieldsprayers with Agrotop AirMix 110-05 in combination with Agrotop AirMix OC 04	First 20 m from field edge spraying with max. 1.5 bar, nozzle height above target 50 cm
75 %	Fieldsprayers with Agrotop TurboDrop HiSpeed 110-05 in combination with Agrotop AirMix OC 04	First 20 m from field edge spraying with max. 3.0 bar, nozzle height above target 50 cm
75 %	Fieldsprayers with ALBUZ CVI Twin 110-05 in combination with Agrotop AirMix OC 04	First 20 m from field edge, nozzle height above target 50 cm
90 %	Fieldsprayers with Agrotop AirMix 110-05 in combination with Agrotop AirMix OC 04	First 20 m from field edge spraying with 1.0 bar, nozzle height above target 50 cm

Field testing:

-

Technical testing:

Institut für Anwendungstechnik im  
Pflanzenschutz des  
Julius Kühn-Instituts,  
Messeweg 11-12,  
38104 Braunschweig © JKI, July 2015