



TEST REPORT

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



Flatfan nozzle Albuz CVI 80-02
(Ceramics, plastic-coated, yellow)

Approved for spraying orchards and vineyards

Applicant
Agrotop GmbH
Köferinger Str. 5
93083 Obertraubling-Gebelkofen

Manufacturer
COORSTEK
Advanced Materials France
Z.I.n° 1- Rue de l'Industrie
EVREUX Cedex

Approved on
11 January 2012

Assessment

The air-injector flatfan nozzle Albus CVI 80-02 (ceramics, plastic-coated, yellow) was tested without accessories. The nozzle is suitable for orchards and vineyards, provided that the following technical requirements are fulfilled:

1. Installation in nozzle tubes with sufficient and a steady amount of liquid flow,
2. Spray pressure – measured in front of the nozzle – between 2.0 and 20.0 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 comply 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)
2.0	0.48	-2.71 %	very coarse
4.0	0.67	-4.22 %	very coarse
6.0	0.82	-4.76 %	coarse
8.0	0.95	-4.80 %	coarse
10.0	1.06	-4.65 %	medium
12.0	1.16	-	medium
15.0	1.30	-4.96 %	medium
20.0	1.50	-	fine

Loss reducing properties

Included in the list „Loss reducing equipment“ (18 June 2012)

Drift reducing classification	operating range	Type of equipment and drift reducing parts	Regulations for use
50 %	Orchards	Sprayers with nozzle Albus CVI 80-02	For the initial first 5 rows, outwardly directed air support must be rendered ineffective. Apart from that, the sprayers have to be adjusted according to the JKI-instructions for adjustment for an optimum distribution of spray deposit.
50 %	Orchards	Sprayers with axial blower with nozzle Albus CVI 80-02	Spray with max. 3 bar. For the first 5 rows the air outlet must be reduced by speed reduction or other suitable measures on max. 30.000 m ³ /h. Apart from that, the sprayers have to be adjusted according to the JKI-instructions for adjustment for an optimum distribution of spray deposit
75 %	Orchards	Sprayers with axial blower with max. 30.000 m ³ /h with nozzle Albus CVI 80-02	Spray with max. 3 bar. For the first 5 rows the air outlet must be reduced by speed reduction or other suitable measures on max. 20.000 m ³ /h. Apart from that, the sprayers have to be adjusted according to the JKI-instructions for adjustment for an optimum distribution of spray deposit
75 %	Vineyards	Sprayers with nozzle Albus CVI 80-02	For the initial first 3 rows, outwardly directed air support must be rendered ineffective. Air outlet max. 20.000 m ³ /h.

Field test

The nozzles were used in the year 2011 on a total of 11.5 hectares in orchards and 114 ha in vineyards, 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 (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.

Field testing:

Dienstleistungszentrum Ländlicher Raum
Rheinhessen-Nahe-Hunsrück
Rüdesheimer Str. 60 – 68
55545 Bad Kreuznach

Technical testing:

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