



# TEST REPORT

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



Double - Flatfan nozzle Albuz CVI Twin 110-04  
(Ceramics, plastic coated, red)

**Approved for spraying field crops**

**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 double-flatfan nozzle CVI Twin 110-04 (Ceramics, plastic coated, red) 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. 500 mm nozzle spacing,
3. 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),
4. Spray pressure – measured in front of the nozzle – between 1.5 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 comply with standard ISO 10625.

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)
1.5	1.11	-2,71 %	3.0 / 3.8 / 287	very coarse
2.0	1.28	-	- / 2.8 / -	very coarse
3.0	1.57	-3.56 %	4.1 / 4.6 / 4.2	coarse
4.0	1.81	-	- / 4.1 / -	coarse
5.0	2.02	-	- / 3.4 / -	coarse
6.0	2.21	-4.82 %	- / 3.0 / -	coarse

## Loss reducing properties

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

Drift reducing classification	Type of equipment and drift reducing parts	Regulations for use
75 %	Fieldsprayers with nozzle CVI Twin 110-04	Nozzle height above target 50 cm.
90 %	Fieldsprayers with nozzle CVI Twin 110-04	First 20 m from field edge spraying with 1.5 bar, nozzle height above target 50 cm.

## Field test

The nozzles were used in the year 2011 on a total of 552 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 (JKI-Guideline 1-2.3.1:1999) and of ISO 5682-1:1999. The requirements of EN 12761-2:2002 and of JKI-Guideline 1-2.1:2010 were fulfilled.

### Field testing:

Landesamt für Verbraucherschutz,  
Landwirtschaft und Flurneuordnung  
Am Halbleiterwerk 1  
15236 Frankfurt/Oder

### Technical testing:

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