



# TEST REPORT

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



**Double - Flatfan nozzle Lechler IDTA 120-05 C  
(Ceramics, plastic-coated, brown)**

**Approved for spraying field crops**

**Applicant and Manufacturer**

Lechler GmbH  
Präzisionsdüsen - Tropfenabscheider  
Ulmer Straße 128  
72555 Metzingen

**Approved on**

**6. January 2016**

## Assessment

The double-flatfan nozzle Lechler IDTA 120-05 C (Ceramics, plastic-coated, brown) 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 2.0 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 nozzle is fitted out with a bajonet cap (MULTIJET). The colour coding of the nozzle comply with standard ISO 10625. In the field edge region the nozzle Lechler IS 80-05 POM shall be used to prevent an overspraying.

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)
2.0	1.61	-1.61 %	3.8 / 2.4 / 1.8	very coarse
3.0	1.97		- / 1.9 / -	very coarse
4.0	2.28	-1.78 %	3.5 / 1.8 / 3.0	very coarse
5.0	2.55		- / 2.1 / -	coarse
6.0	2.79	-4.52 %	- / 2.2 / -	coarse
7.0	3.01		- / - / -	coarse
8.0	3.22	-4.96 %	- / 2.4 / -	coarse

## Field test

The nozzles were used in the year 2015 on a total of 800 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 2-1.1:2013) and of ISO 5682-1:1999. The requirements of ISO 16119-2:2013 and of JKI-Guideline 1-2.1:2013 were fulfilled.

### Field testing:

Landwirtschaftskammer Niedersachsen  
Wunstorfer Landstraße 9  
30453 Hannover

### Technical testing:

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