



TEST REPORT

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



**Injector flatfan nozzle Lechler IDK 90-03 C
(Ceramics, plastic-coated, blue)**

Approved for spraying in orchards and vineyards

Applicant and Manufacturer

Lechler GmbH
Präzisionsdüsen – Tropfenabscheider
Ulmer Straße 128
72555 Metzingen

Approved on

26 February 2021

Assessment

The injector flatfan nozzle Lechler IDK 90-03 C (Ceramics, plastic-coated, blue) was tested without accessories. The nozzle is suitable for spraying in orchards and vineyards, provided that the following technical requirements are fulfilled:

1. Installation in nozzle tubes with a 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 complies with standard ISO 8169. The colour coding of the nozzle 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 (ISO 25358)
2.0	0.95	-4.16 %	very coarse
3.0	1.16	-	very coarse
4.0	1.34	-	very coarse
5.0	1.50	-4.35 %	coarse
6.0	1.64	-	medium
8.0	1.90	-4.48 %	medium
10.0	2.12	-4.61 %	medium
15.0	2.60	-4.46 %	-
20.0	3.00	-	-

Field test

The nozzles were used in the year 2020 on a total of 4.4 hectares in orchards. A sufficient effect of 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:

Landesamt für ländliche Entwicklung,
Landwirtschaft und Flurneuordnung
- Pflanzenschutzdienst -
Müllroser Chaussee 54
15236 Frankfurt (Oder)

Technical testing:

Institute for Application Techniques in
Plant Protection
Messeweg 11-12,
38104 Braunschweig

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