TEST REPORT

of the

Julius Kühn-Institut

Federal Research Institute
for Cultivated Plants, Braunschweig

Double - Flatfan nozzle Lechler IDTA 120-03 C
(Ceramics, plastic-coated, blue)

Approved for spraying field crops

Applicant and Manufacturer
Lechler GmbH
Präzisionsdüsen - Tropfenabscheider
Ulmer Straße 128
72555 Metzingen

Approved on
6. January 2016

Institute for Application Technique in Plant Protection DOI: 10.5073/AT.2016.G2016en
Messeweg 11-12, 38104 Braunschweig - GERMANY

Assessment

The double-flatfan nozzle Lechler IDTA 120-03 C (Ceramics, plastic-coated, blue) 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 eveness 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 80-03 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	0.97	-4.43 %	4.4 / 3.3 / 2.7	very coarse
3.0	1.19		- / 2.7 / -	very coarse
4.0	1.37	-4.34 %	4.5 / 2.8 / 3.4	very coarse
5.0	1.53		- / 3.4 / -	very coarse
6.0	1.68	-3.75 %	- / 4.2 / -	very coarse
7.0	1.81		- / - / -	coarse
8.0	1.94	-2.82 %	- / 5.3 / -	coarse

Field test

The nozzles were used in the year 2015 on a total of 1283 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 Nordrhein-Westfalen
Pflanzenschutzdienst Referat 52
Nevinghoff 40

48147 Münster

Technical testing:
Institut für Anwendungstechnik im Pflanzenschutz des
Julius Kühn-Instituts,
Messeweg 11-12,
38104 Braunschweig