# TEST REPORT



## Julius Kühn-Institut

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Offcenter flatfan nozzle Lechler IS 80-02 (plastic, yellow) in combination with Lechler ID-120-02 POM or ID 120-02 C or ID 120-02 POM

Approved for spraying field crops used at the end of the spray boom

Applicant and Manufacturer Lechler GmbH Präzisionsdüsen – Tropfenabscheider Ulmer Strasse 128 72555 Metzingen Approved on 13 January 2015

### <u>Assessment</u>

The offcenter flatfan nozzle Lechler IS 80-02 POM (plastic, yellow) was tested without accessories. The nozzle is suitable for spraying field crops, provided that the following technical requirements are fulfilled:

- 1. Usage of the nozzle at the end of the spray boom in combination with Lechler ID-120-02 POM or ID 120-02 C or ID 120-02 POM,
- 2. Installation in a spray boom with a sufficient and a steady amount of liquid flow,
- 3. 500 mm nozzle spacing,
- 4. 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),
- 5. 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 nozzles have a key width of 10 mm. The dimensions of the nozzle tip comply with standard ISO 8169. The colour coding do not comply with standard ISO 10625.

Pressure	Liquid flow volume	Max. deviation of single	Droplet spectrum
(bar)	without accessories	nozzle flow from the	(BCPC-Standard)
	(l/min)	dosage tables	
2.0	0.49	3.73 %	very coarse
2.5	0.54	-	
3.0	0.60	-	very coarse
3.5	0.64	-	
4.0	0.69	-	very coarse
4.5	0.73	-	
5.0	0.77	-4.29 %	very coarse
5.5	0.81	-	
6.0	0.84	-	very coarse
6.5	0.88	-	
7.0	0.91	-	very coarse
7.5	0.94	-	
8.0	0.97	3.41 %	very coarse

### Loss reducing properties

Included in the list "Loss reducing equipment" (as of 23 March 2015)

Drift reducing classification	Type of equipment and drift reducing parts	Regulations for use
50 %	Fieldsprayers with Lechler ID-120-02 POM	First 20 m from field edge spraying with max. 6.0 bar, nozzle
	in combination with Lechler IS 80-02 POM	height above target 50 cm
50 %	Fieldsprayers with Lechler ID 120-02 POM	First 20 m from field edge spraying with max. 3.5 bar, nozzle
	in combination with Lechler IS 80-02 POM	height above target 50 cm

### 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:

<u>Technical testing:</u>

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