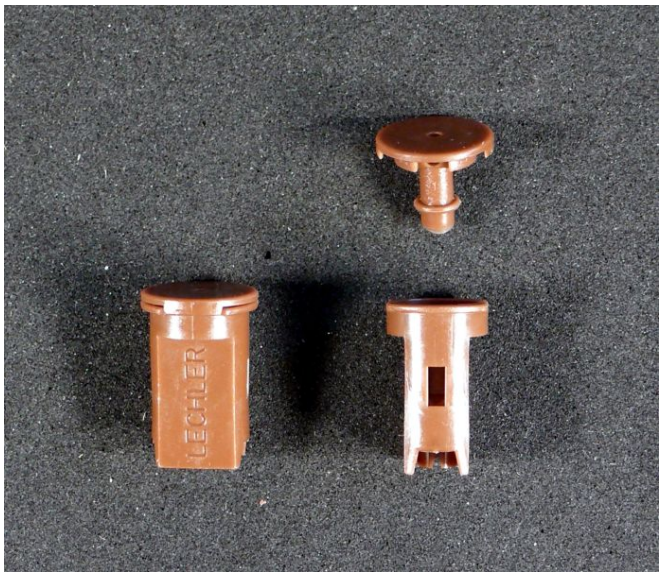
TEST REPORT

of the

Julius Kühn-Institut

Federal Research Institute
for Cultivated Plants, Braunschweig



Mixed nozzle assembly comprising of Lechler IDKT 120-05 POM (Certification number G 1884) or Lechler IDKT 120-05 C (Certification number G 1836) and 6 x nozzle Lechler IDK 120-05 POM (Certification number G 1663) used in the section behind the sprayer to prevent the unintended spraying of sprayer parts

Approved for spraying field crops

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

Approved on
13 March 2012

Assessment

Mixed assembly consisting of the nozzle Lechler IDKT 120-05 POM (plastic, brown) or Lechler IDKT 120-05 C (ceramic, plastic coated, brown) combined with six nozzles Lechler IDK 120-05 POM used in the section behind the sprayer to prevent unintended spraying of sprayer parts. The nozzle set was tested without additional accessories and 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 1.0 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 complies 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)
1.0	1.14	4.56 %	6.1 / 8.3 / 4.3	very coarse
2.0	1.61	-	- / 2.8 / -	very coarse
3.0	1.97	3.19 %	3.1 / 3.1 / 3.0	very coarse
4.0	2.27	-2.76 %	- / 3.4 / -	very coarse
5.0	2.54	-	- / 3.5 / -	very coarse
6.0	2.78	2.49 %	- / 3.5 / -	very coarse

Loss reducing properties
Included in the list „Loss reducing equipment“ (4. April 2013)

Drift reducing classification	Type of equipment and drift reducing parts	Regulations for use
50 %	Fieldsprayers with nozzle Lechler IDKT 120-05 POM and IDK 120-05 POM	First 20 m from field edge spraying with max. 3.0 bar, Nozzle height above target 50 cm
75 %	Fieldsprayers with nozzle Lechler IDKT 120-05 POM and IDK 120-05 POM	First 20 m from field edge spraying with max. 1.5 bar, nozzle height above target 50 cm
90 %	Fieldsprayers with nozzle Lechler IDKT 120-05 POM and IDK 120-05 POM	First 20 m from field edge spraying with 1.0 bar, nozzle height above target 50 cm

Basics for testing
The tests were carried out on basis of the Regulations for Testing Plant Protection Equipment (Guideline 1-2.3.1:1999) and of ISO 5682-1:1999. The requirements of EN 12761-2:2002 and of JKI-Guideline 1-2.1:2004 were fulfilled.

Field testing:
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Technical testing:
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