Flatfan nozzle Lechler IDK 90-015 C
(Ceramics, plastic-coated, green)

Approved for spraying field crops
with 250 mm nozzle spacing

Applicant and Manufacturer
Firma Lechler GmbH
Agrardüsen und Zubehör
Postfach 13 23
72544 Metzingen/Germany

Approved on
9 January 2017
Assessment

The flatfan nozzle Lechler IDK 90-015 C (Ceramics, plastic-coated, green) 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. 250 mm nozzle spacing,
3. 40 cm between nozzles and spray target (consistency of evenness of cross distribution proved satisfactory at a distance range from 30 cm to 50 cm),
4. Spray pressure – measured in front of the nozzle – between 1.5 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 8 mm. The dimensions of the nozzle tip comply with standard ISO 8169. The colour coding comply with standard ISO 10625.

<table>
<thead>
<tr>
<th>Pressure (bar)</th>
<th>Liquid flow volume without accessories (l/min)</th>
<th>Max. deviation of single nozzle flow from the dosage tables</th>
<th>Evenness of cross distribution at (cm)</th>
<th>Droplet spectrum (BCPC-Standard)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5</td>
<td>0.40</td>
<td>-3.23.%</td>
<td>6.4 / 6.0 / 5.1</td>
<td>very coarse</td>
</tr>
<tr>
<td>2.0</td>
<td>0.46</td>
<td>-</td>
<td>- / - / -</td>
<td>very coarse</td>
</tr>
<tr>
<td>3.0</td>
<td>0.57</td>
<td>-4.55 %</td>
<td>- / 7.2 / -</td>
<td>very coarse</td>
</tr>
<tr>
<td>4.0</td>
<td>0.66</td>
<td>-</td>
<td>2.7 / 5.7 / 2.5</td>
<td>very coarse</td>
</tr>
<tr>
<td>5.0</td>
<td>0.73</td>
<td>-4.38 %</td>
<td>- / 3.3 / -</td>
<td>coarse</td>
</tr>
<tr>
<td>6.0</td>
<td>0.80</td>
<td>-</td>
<td>- / 1.8 / -</td>
<td>coarse</td>
</tr>
<tr>
<td>7.0</td>
<td>0.87</td>
<td>-</td>
<td>- / - / -</td>
<td>coarse</td>
</tr>
<tr>
<td>8.0</td>
<td>0.93</td>
<td>-4.37 %</td>
<td>- / 2.0 / -</td>
<td>coarse</td>
</tr>
</tbody>
</table>

Field test

The nozzles were used in the year 2016 on a total of 616 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 (Guideline 2-1.1:2013) and of ISO 5682-1:1999. The requirements of EN 16119-2:2013 and of JKI-Guideline 1-2.1:2013 were fulfilled.

Field testing:
Landesamt für Landwirtschaft, Lebensmittelsicherheit und Fischerei
RD Groß Nemerow
OT Tollenseheim, Nr. 6a
17094 Groß Nemerow

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