Hollow cone nozzle ASJ HCA 80-025
(Ceramics, plastic-coated, lilac)

Approved for spraying orchards and vineyards

Applicant and Manufacturer
ASJ Spray-Jet
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Assessment

The air-injection hollow cone nozzle ASJ HCA 80-025 (ceramics, plastic-coated, lilac) was tested without additional accessories and is suitable for orchards and vineyards, provided that the following technical requirements are fulfilled:

1. Installation in nozzle tubes with sufficient and a steady amount of liquid flow,

2. Spray pressure – measured in front of the nozzle – between 3.0 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 comply with standard ISO 8169. The colour coding of the nozzle tip 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>Droplet spectrum (BCPC-Standard)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>1.01</td>
<td>4.82 %</td>
<td>very coarse</td>
</tr>
<tr>
<td>4.0</td>
<td>1.17</td>
<td>-</td>
<td>very coarse</td>
</tr>
<tr>
<td>5.0</td>
<td>1.31</td>
<td>4.19 %</td>
<td>very coarse</td>
</tr>
<tr>
<td>6.0</td>
<td>1.43</td>
<td>-</td>
<td>coarse</td>
</tr>
<tr>
<td>8.0</td>
<td>1.66</td>
<td>-</td>
<td>coarse</td>
</tr>
<tr>
<td>10.0</td>
<td>1.85</td>
<td>4.07 %</td>
<td>coarse</td>
</tr>
<tr>
<td>12.0</td>
<td>2.03</td>
<td>-</td>
<td>coarse</td>
</tr>
<tr>
<td>15.0</td>
<td>2.27</td>
<td>4.80 %</td>
<td>medium</td>
</tr>
<tr>
<td>20.0</td>
<td>2.62</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Field test: The nozzles were used in the year 2015 on a total of 22 hectares in vineyards, 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 ISO 16119-2:2013 and of JKI-Guideline 1-2.1:2013 were fulfilled.

Field testing:
Staatl. Lehr- und Versuchsanstalt
Für Wein- und Obstbau
Traubenplatz 5
74189 Weinsberg

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

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Test reports are available at the Julius Kühn-Institut, Messeweg 11-12, 38104 Braunschweig (www.julius-kuehn.de).