



# TEST REPORT

of the  
**Julius Kühn-Institut**  
Federal Research Institute  
for Cultivated Plants, Braunschweig



**Hollow cone nozzle John Deere PSHCCQ8003  
(ceramics, plastic-coated, blue) identical with Lechler  
TR 80-03 C**

**Approved for spraying in orchards and vineyards**

**Applicant**  
Hypro EU LTD  
Station Road  
Longstanton  
CB24 3DS CAMBRIDGE, UK

**Manufacturer**  
Lechler GmbH  
Präzisionsdüsen – Tropfenabscheider  
Ulmer Strasse 128  
72555 Metzingen

**Approved on**  
**11 May 2021**

## Assessment

The hollow cone nozzle John Deere PSHCCQ8003 (ceramics, plastic-coated, blue) was tested with filter and bayonet cap. The nozzle is suitable for spraying in orchards and vineyards, provided that the following technical requirements are fulfilled:

1. Installation in nozzle tubes with a sufficient and a steady amount of liquid flow,
2. Spray pressure – measured in front of the nozzle – 3.0 and 15.0 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 colour coding of the nozzle complies with standard ISO 10625.

Pressure (bar)	Liquid flow volume without accessories (l/min)	Max. deviation of single nozzle flow from the dosage tables
3.0	1.15	-
4.0	1.32	-
5.0	1.48	-4.52 %
6.0	1.62	-
7.0	1.75	-
8.0	1.87	-4.58 %
9.0	1.99	-
10.0	2.09	-4.93 %
11.0	2.20	-
12.0	2.29	-
13.0	2.39	-
14.0	2.48	-
15.0	2.56	-

## 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:

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## Technical testing:

Institute for Application Techniques in  
Plant Protection  
Messeweg 11-12,  
38104 Braunschweig

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