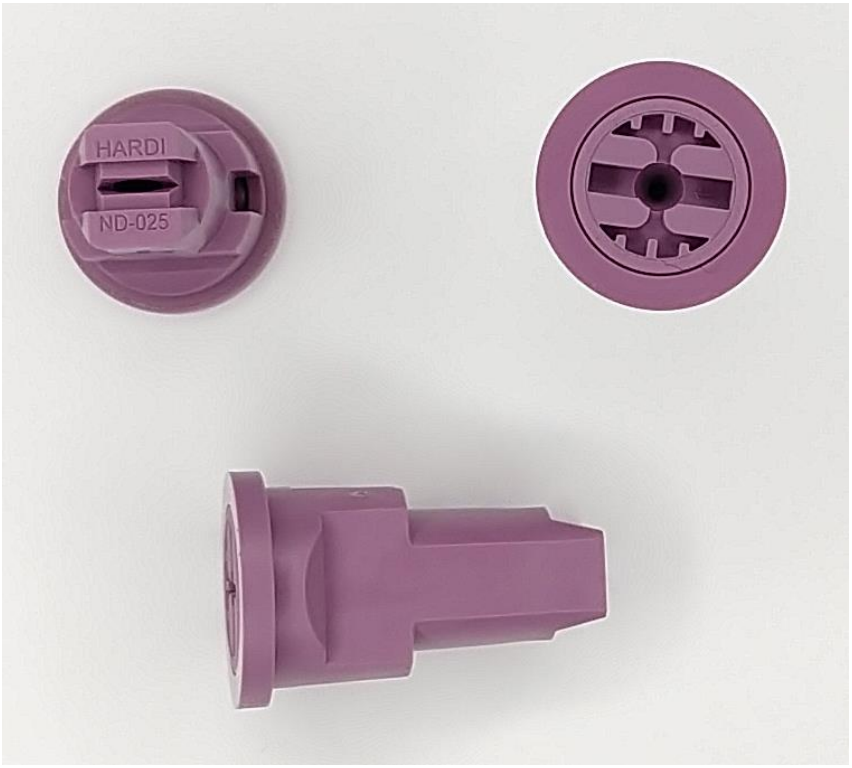
TEST REPORT

of the

Julius Kühn-Institut

Federal Research Institute
for Cultivated Plants, Braunschweig



Flatfan nozzle HARDI NanoDrift ND 025
(Plastic, lilac)

Approved for spraying field crops

Applicant
HARDI INTERNATIONAL A/S
Helgeshoj Allé 38
DK-2630 Taastrup

Manufacturer
HARDI GmbH
Schaumburger Straße 17
30900 Wedemark

Approved on
24 February 2021

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

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Assessment

The flatfan nozzle HARDI NanoDrift ND 025 (Plastic, lilac) 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. 500 mm nozzle spacing,

3. 50 cm between nozzles and spray target (consistency of evenness 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 1.5 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 nozzles have a key width of 8 mm. 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	Evenness of cross distribution at (cm) 40 / 50 / 60 (Vk %)	Droplet spectrum (ISO 25358)
1.5	0.70	-	6.3 / 7.1 / 3.0	ultra coarse
2.0	0.81	-	- / 3.2 / -	extreme coarse
3.0	0.99	3.50 %	3.4 / 5.4 / 4.8	very coarse
4.0	1.14	-3.01 %	- / 4.9 / -	very coarse
5.0	1.28	-	- / - / -	very coarse
6.0	1.40	-4.01 %	- / 3.7 / -	coarse

Loss reducing properties
Included in the list „Loss reducing equipment“ (11 May 2022)

Drift reducing classification	Type of equipment and drift reducing parts	Regulations for use
50 %	Fieldsprayers with nozzle Hardi NanoDrift ND 025	First 20 m from field edge spraying with max. 3.0 bar, Nozzle height above target 50 cm.
75 %	Fieldsprayers with nozzle Hardi NanoDrift ND 025	First 20 m from field edge spraying with 1.5 bar, nozzle height above target 50 cm.

Field test
The nozzles were used in the year 2020 on a total of 2000 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:
Landwirtschaftskammer Schleswig-Holstein
Grüner Kamp 15- 17
24768 Rendsburg

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