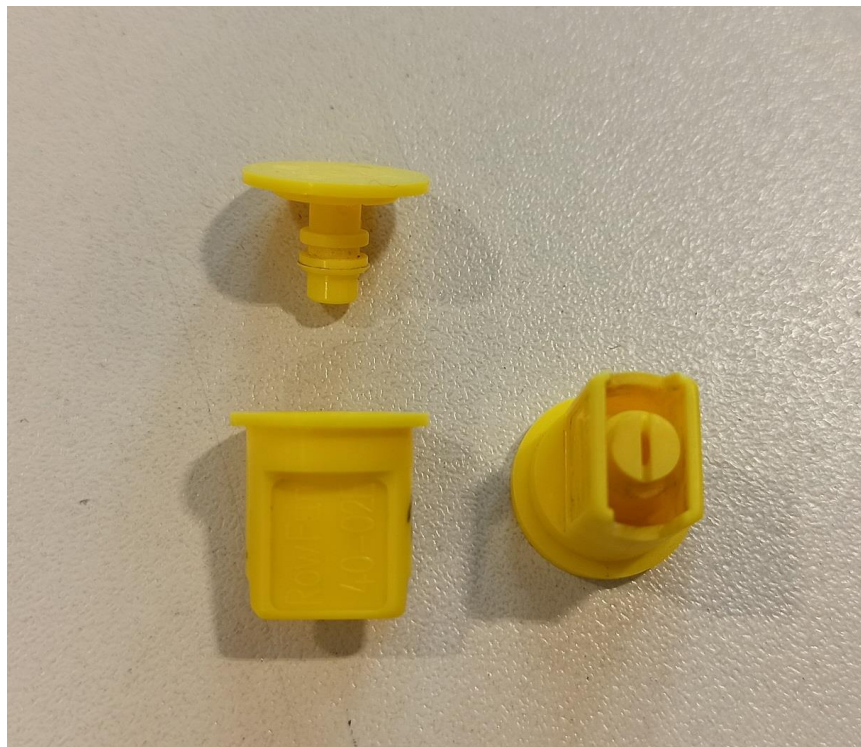




TEST REPORT

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



**Injector - flatfan nozzle Agrotop RowFan 40-02E
(Plastic, yellow)**

**Approved for strip spraying in field crops with 15 cm to 40 cm
distances between nozzles and target surface**

Applicant and Manufacturer

Agrotop GmbH
Köfinger Straße 5
93083 Obertraubing
Deutschland

**Approved on
29. März 2022**

Assessment

The injector - flatfan nozzle Agrotop RowFan 40-02E (Plastic, yellow) was tested without accessories. The nozzle is suitable for strip spraying / band spraying in 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. The field sprayer boom/band sprayer boom is adjustable to the corresponding row spacing of the treated culture,
3. Distance from the nozzles to the spray area according the table below,
4. Spray pressure – measured in front of the nozzle – between 2.0 and 6.0 bar; liquid volume flow per nozzle as stated in table below.
5. Use with special bayonet caps that allow rotation of the nozzle from 7° to 20°.

Use as a strip spray nozzle (nozzle rotation between 7° and 20°) for the following pressure and target distances:

Spray pressure (bar)	Distance to target	Effective spray width (7° nozzle rotation)	Effective spray width (20° nozzle rotation)
2.0 to 6.0	15 cm	15 cm	12.5 cm
2.0 to 6.0	25 cm	20 cm	20 cm
2.0 to 6.0	40 cm	30 cm	25 cm

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	Droplet spectrum (ISO 25358)
2.0	0.67	4.74 %	very coarse
2.5	0.75	3.77 %	very coarse
3.0	0.82	-	very coarse
4.0	0.95	3.34 %	coarse
5.0	1.06	-	coarse
6.0	1.16	2.70 %	medium

Field test

The nozzles were used in the year 2021 on a total of 414 hectares (strip spraying with spray boom 24 hectares, strip spraying with band sprayer 390 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:

Thüringer Landesamt für Landwirtschaft
und Ländlicher Raum (TLLLR)
Referat 410 - Pflanzenschutz
Apoldaer Straße 4
07774 Dornburg-Camburg

and

Bayer. Landesanstalt für
Landwirtschaft (LfL)
Institut für Pflanzenschutz
Lange Point 10
85354 Freising

Technical testing:

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

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