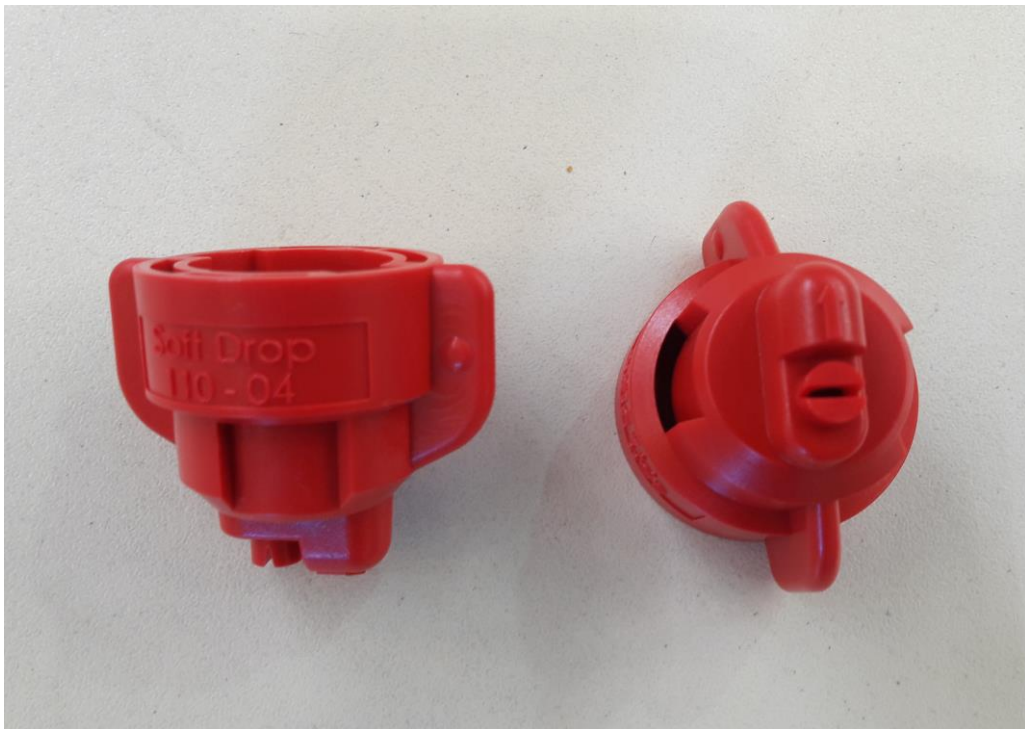




TEST REPORT

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



Flatfan nozzle Agrotop SoftDrop 110-04
(Plastic, red)

Approved for spraying field crops

Applicant and Manufacturer
Agrotop GmbH
Köferinger Straße 5
93083 Obertraubling

Approved on
3 Dezember 2019

Assessment

The flatfan nozzle Agrotop SoftDrop 110-04 (Plastic, red) 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 2.0 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 colour coding of the nozzle comply with standard ISO 10625. For application in the field edge area, the last nozzle in the boom can be replaced by an Agrotop AirMix OC 80-03 edge nozzle in order to prevent the edge area from being sprayed over.

| 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) |
|----------------|--|---|--|------------------------------|
| 2.0 | 1.25 | - 4.21 % | 8.5 / 7.0 / - | extreme coarse |
| 3.0 | 1.54 | 2.10 % | - / 3.6 / - | very coarse |
| 4.0 | 1.77 | - | 5.1 / 3.1 / 4.6 | very coarse |
| 5.0 | 1.98 | - 4.04 % | - / 4.0 / - | very coarse |
| 6.0 | 2.17 | - | - / 4.4 / - | very coarse |

Loss reducing properties

Included in the list „Loss reducing equipment“ (15 July 2021)

| Drift reducing classification | Type of equipment and drift reducing parts | Regulations for use |
|-------------------------------|---|--|
| 50 % | Fieldsprayers with nozzle Agrotop SoftDrop 110-05 | Spraying with max. 6.0 bar, nozzle height above target 50 cm. |
| 75 % | Fieldsprayers with nozzle Agrotop SoftDrop 110-05 | First 20 m from field edge spraying with max. 3.0 bar, nozzle height above target 50 cm. |
| 90 % | Fieldsprayers with nozzle Agrotop SoftDrop 110-05 | First 20 m from field edge spraying with 2.0 bar, nozzle height above target 50 cm. |

Field test

The nozzles were used in the year 2018 on a total of 717 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
Nordrhein-Westfalen
Pflanzenschutzdienst, Ref. 62
Nevinghoff 40
48147 Münster

Technical testing:

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