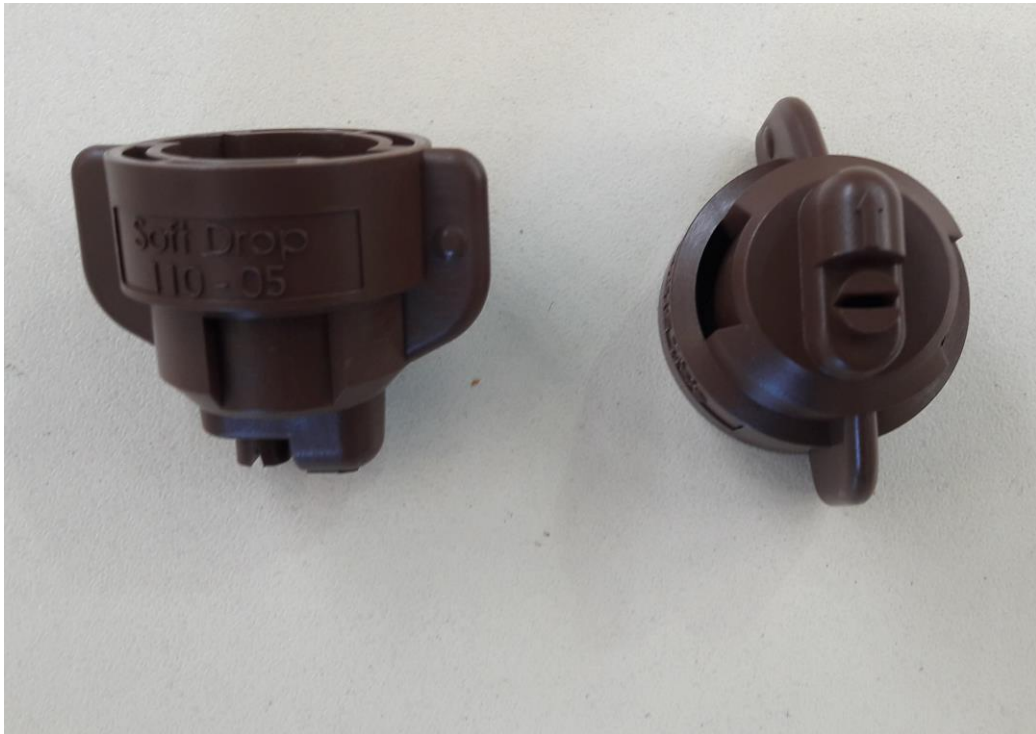




# TEST REPORT

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



Flatfan nozzle Agrotop SoftDrop 110-05  
(Plastic, brown)

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 110-05 (Plastic, brown) 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 80-04 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	1.61	- 3.55 %	7.5 / 6.9 / 7.5	extreme coarse
3.0	1.97	3.06 %	- / 5.2 / -	very coarse
4.0	2.27	-	4.9 / 5.3 / 3.8	very coarse
5.0	2.54	- 2.83 %	- / 4.9 / -	very coarse
6.0	2.78	-	- / 4.7 / -	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. 5.0 bar, nozzle height above target 50 cm.
90 %	Fieldsprayers with nozzle Agrotop SoftDrop 110-05	First 20 m from field edge spraying with max. 2.5 bar, nozzle height above target 50 cm.

## Field test

The nozzles were used in the year 2018 on a total of 716 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 Niedersachsen  
Pflanzenschutzamt  
Wunstorfer Landstraße 9  
30453 Hannover

### Technical testing:

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