Responsibility and recognition

Performing competent authority:

Crop Protection Technology
DISAFA – Università di Torino
Largo P. Braccini, 2
I -10095 Grugliasco (TO)

This test is recognized by the ENTAM members:

Generalitat de Catalunya Departament d'Agricultura, Alimentació i Acció Rural	**CMA** - Administració de la Generalitat de Catalunya, Centre de Mecanització Agrària – SPAIN
research & testing BLT wieselburg F | J josephinum.at	**HBLFA** Francisco Josephinum – BLT Wieselburg – AUSTRIA
irstea	**IRSTEA** - (formerly CEMAGREF) – FRANCE
JKI Julius Kühn-Institut Bundesforschungsinstitut für Kulturpflanzen	**JKI** - Julius Kühn-Institut (formerly BBA) – GERMANY
GÖDÖLLŐ 1869	**MGI -** MEZOGAZDASÁGI GÉPESÍTÉSI INTÉZET– HUNGARY
PIMR	**PIMR** - Przemyslowy Instytut Maszyn Rolniczych – POLAND

ENAMA
ENTE NAZIONALE PER LA MECCANIZZAZIONE AGRICOLA

ENTAM

ENTAM - Test Report

Trade mark:	ASJ
Model:	AFC 8002 (Zinc yellow)
Equipment type:	Flat Fan hydraulic nozzle
Air injection:	Yes
Field of application:	Air assisted sprayer/boom sprayer
Pressure range:	3 – 8 bar

Manufacturer:
ASJ Srl
Via Busca, 101
I - 12044 Centallo (CN) - ITALY

Test report: 46a.048

March 2019

Test results

This nozzle has been tested without accessories.
This nozzle is appropriate for the use of spraying with air assisted sprayer and boom sprayer (at working height of 0.70 m) with a liquid pressure of 3 - 8 bar.

- For a pressure of 5.0 bar the max. deviation of the single nozzle flow rates from the mean flow rate is 1.3%.
- A spray angle of 87° at 5 bar was determined.
- For a pressure of 5.0 bar the evenness of spray pattern of 10 nozzles -expressed by the uniformity index (Ui)- is 0.14.
- For a pressure of 5.0 bar the cross distribution (CV) is 6.9% at a working height of 0.70 m. See tab. 1
- The nozzle fullfils the discharge rate requirement of the color code according ISO 10625 (color code: zinc yellow 0.8 l/min at 3.0 bar). A flow rate of 0.78 l/min at 3.0 bar was determined. See tab. 2
- The deviation between the measured single nozzle flow rate and the flow rate table is between -4.9% and -0.5%. The maximum allowed deviation is 5%.

Free download of the complete test report under: www.ENTAM.net
or: www.ENAMA.it

Test results

Pressure (bar)	Working height (m)		
	0.55	0.70	0.85
3.0	--	9.0%	--
5.0	7.6%	6.9%	8.5%
8.0	--	7.5%	--

Tab. 1 Cross distribution at different liquid pressure and working height.

Pressure (bar)	Discharge rate without accessories (l/min)	Max deviation from nominal flow rate
1.5	0.55	4.9%
3.0	0.78	4.1%
5.0	1.00	4.4%
6.0	1.10	4.7%
8.0	1.27	4.9%

Tab. 2 Discharge rate depending on liquid pressure.

Additional information

The tested nozzles (20) were picked randomly out of a stock of 200 nozzles. Testing takes place according to the Technical Instructions for ENTAM-Tests of Spray nozzles, rel.1.
This procedure was developed by the competent testing authorities of the European countries participating in ENTAM and is based on the ISO 5682 standard: "Equipment for crop protection – Spraying equipment; Part 1 Test method for sprayer nozzles" and on EN –ISO 16119 standard: "Agricultural and forestry machinery – Sprayers and liquid fertilizer distributors – Environmental protection; Part 2". This test is only a technical performance test which takes place without an accompanying filed test. The test results apply only to the tested appurtenances of the sprayer. Statements on the behaviour of different appurtenances cannot be derived from these results.