

## Responsibility and recognition



### Performing competent authority:

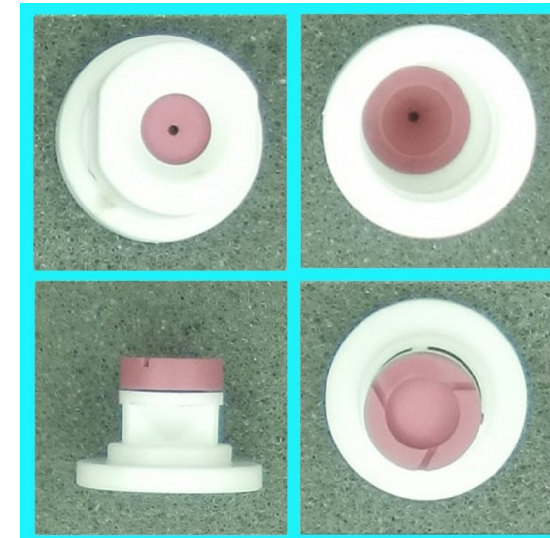
Crop Protection Technology  
DEIAFA - meccanica  
Via L. da Vinci, 44  
I -10095 Grugliasco (TO)

### This test is recognized by the ENTAM members:

	AU/DAE - University of Aarhus - Department of Agricultural Engineering - DENMARK	AU DAE ENTAM 2011 - 02
	Cemagref - Institut de recherche pour l'ingénierie de l'agriculture et de l'environnement – FRANCE	CEMAGREF / ENTAM / 11 / 027
	CMA - Centre de Mecanització Agrària - SPAIN	EB002/11
	HBLFA Francisco Josephinum Wieselburg - BIOMASS   LOGISTICS   TECHNOLOGY (FJ-BLT) - AUSTRIA	008/11
	JKI - Julius Kühn-Institut (formerly BBA) – GERMANY	ENT-I-01/11
	MGI - MEZOGAZDASÁGI GÉPESÍTÉSI INTÉZET Hungarian Institute of Agricultural Engineering - HUNGARY	I-43 2011
	N.AG.RE.F - National Agricultural Research Foundation - GREECE	AE/133/01/ZZ
	PIMR - Przemysłowy Instytut Maszyn Rolniczych - Industrial Institute of Agricultural Engineering - POLAND	PIMR- 60/ENTAM/11



## ENTAM - Test Report



Trade mark: ASJ  
Model: HCC 005 (white)  
Equipment type: Hollow cone hydraulic nozzle

Field of application: Air assisted sprayer  
Pressure range: 3 – 15 bar

**Manufacturer:**  
ASJ srl  
Via Busca, 101  
I - 12044 Centallo (CN)

**Test report: 46a.020**  
March 2011

### Test results

This nozzle has been tested without accessories.  
This nozzle is appropriate for the use of spraying with air assisted sprayer with a liquid pressure of 3 - 15 bar.

- The deviation between the measured single nozzle flow rate and the flow rate table is between -1.2% and 4.2%.  
The maximum allowed deviation is 5%.
- The max. deviation of the single nozzle flow rates from the mean flow rate is 4.2%.
- A spray angle of 77° at 5 bar was determined.
- A flow rate of 0.21 l/min at 3 bar was determined. See tab.1.
- The orifice material is ceramic.

### Test results

Pressure (bar)	Discharge rate without accessories (l/min)	Deviation from the mean flow rate
3.0	0.21	2.5%
5.0	0.27	2.6%
10.0	0.38	2.7%
15.0	0.47	4.0%

Tab. 1: Discharge rate depending on liquid pressure.

### Additional information

The droplet size, measured at 5 bar liquid pressure according BCPC scheme, is "very fine".

The evenness of spray pattern of 10 nozzles is expressed by the uniformity index (Ui) determined comparing the single nozzle distribution. The Ui determined at 5 bar is 0.46.

*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 12761 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 field test. The test results apply only to the tested appurtenances of the sprayer. Statements on the behavior of different appurtenances cannot be derived from these results.*

Free download of the complete test report under: [www.ENTAM.net](http://www.ENTAM.net)  
or: [www.ENAMA.it](http://www.ENAMA.it)