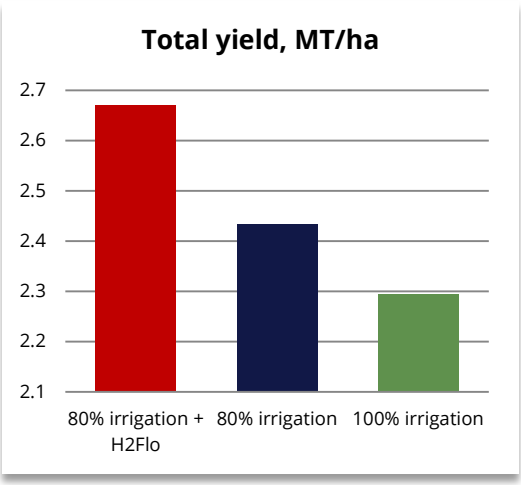
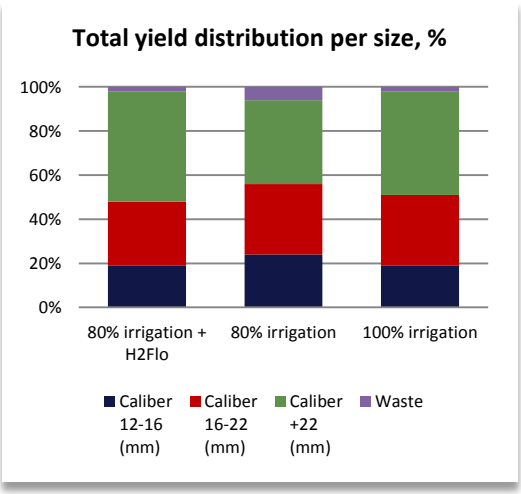
Trial Information

H2Flo®

ASPARAGUS





H2Flo is a unique blend of surfactants designed to move water and fertilizers quickly and efficiently through soil. H_2Flo leads the way in water conservation products with the highest concentration of active ingredients (88%) of the most advanced wetting agents available. H2Flo allows growers and farmers to move less water and save more water.

H2Flo can be applied as an initial humectant and also during the normal irrigation cycle where it will also aid the movement of fertilizers throughout the soil and thus balancing the EC levels.

Trial set-up

Objective: Demonstrate that applying H_2FLO will result in a reduction in irrigation volume while maintaining or increasing yield.

When: June 2015- May 2016

Trial station: France

Crop: Asparagus, variety Grolim – white

Application method: Irrigation

Soil type: Sandy soil

Assessments: Total Yield
Commercial yield
Caliber distribution

Conclusions

- By using H2Flo, the yield increased up to 16% compared to grower practice (100% irrigation) and reduced irrigation water by 20%
- The total yield increased, especially in the 22+ caliber
- H2Flo provided an extra income of 2,413 €/ha, compared to normal grower practice (100% irrigation), achieved only from extra yield. Reduced costs of less irrigation water, pump costs etc., are not included.

www.icl-sf.com

ICL Specialty Fertilizers

Fertilizer plan:
Both treatments received the same nutrition program.

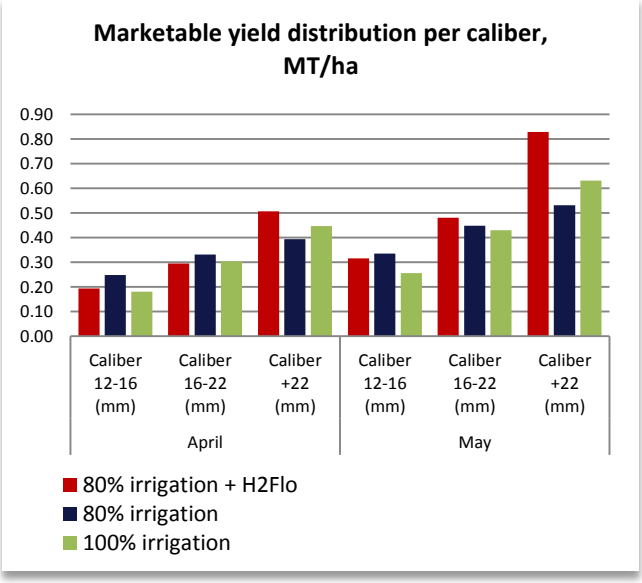
Treatments:

Grower practice	H2Flo
No usage of water conservation/ surfactants. 2 irrigation programs - 100% and 80% irrigation	The addition of H2Flo in the irrigation system was done once a week from 26/06/15 to 02/10/15 Dosage of H2Flo: 1.2 ltr/ha with first irrigation and 0.15 ltr/ha for weekly application in the period mentioned above

** all objects received the same amount of water from rainfall. Thus it seems that the normal grower practice (100% irrigation) received more water than the crop needs it, resulting in lowest performance as total yield.*

Economic evaluation	80% irrigation + H2Flo	80% irrigation	100% irrigation
Marketable yield, MT/ha	2.62	2.29	2.25
Gross income, €/ha	17,270	14,698	14,792
Extra cost of ICL treatment (vs. grower practice) , €/ha	65		
Extra income/ha (vs. 80% irrigation), €/ha	2,507		
Extra income/ha (vs. 100 % irrigation), €/ha	2,413		

Economic evaluation was calculated based on the price level for different calibers, published in April and May 2016 in Languedoc – Provence Region from France.



Why does H_2Flo perform better?

- H2Flo enhances both horizontal and vertical movement of water into the soil
- H2Flo stimulates the root system to use the available nutrients as efficient as possible
- H2Flo lowers the surface tension of the water, allowing it to penetrate into the soil as it can spread more easy between the soil particles
- With the reduced amount of water and the same level of nutrients, H2Flo maintains an optimum level of soil moisture for plants, increases plant productivity and the final crop quality, especially in sandy soils.

Attention
Recommendations in this trial info sheet are based on local soil and/or water analyses. Please contact your local ICL Specialty Fertilizers adviser for your personalized fertilizer recommendation. Consult **www.icl-sf.com** for your contact in the region.

Distributed by:
ICL Specialty Fertilizers
P.O. Box 40 - 4190 CA Geldermalsen
Koeweistraat 4 - 4181 CD Waardenburg
The Netherlands