



Fertilizer

Quality Assurance



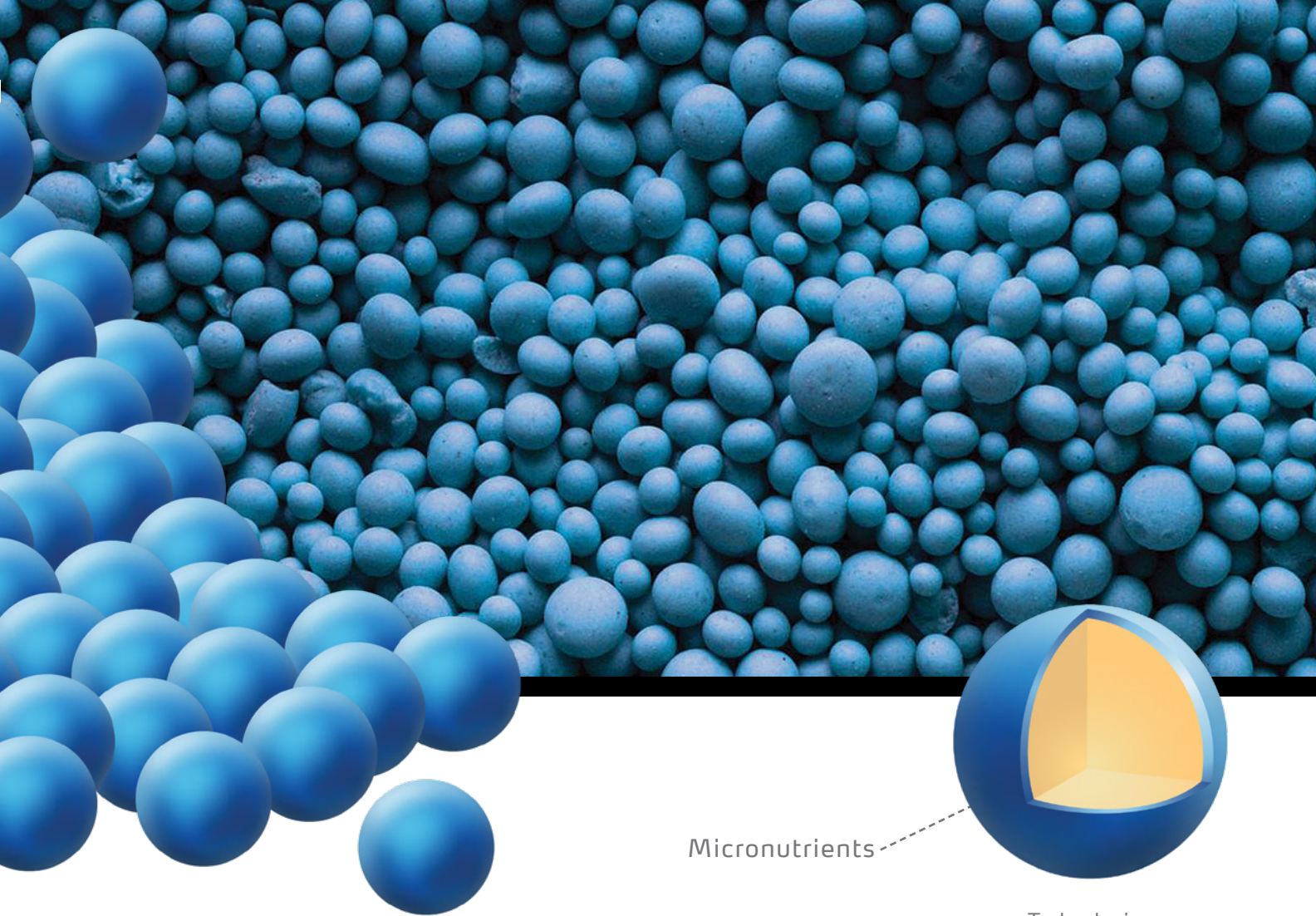
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Micronutrients

Technologies



FERTILIZER

granular starter



5* Starter with Micronutrients

ACCORDING TO IDENTIFIED NEEDS
BY A THOROUGH SOIL ANALYSIS,
TO FULLY SUPPLEMENT THE
DEFICIENCIES IN
ZINC, BORON,
COPPER, MANGANESE

FERTILIZER 3&5★

5* granular Starter with Micronutrients



Micronutrients

Technologies



to fully supplement the deficiencies



ZINC



BORON



COPPER



MANGANESE



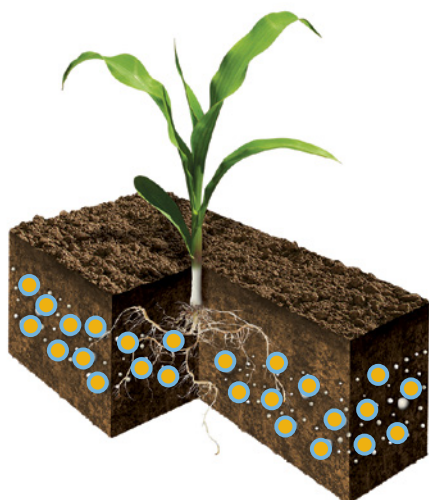
PROGRAMS

Our 3 and 5 Star programs are fertilization concepts that boost soil capacity to release nutrients from the soil using fertilizer bases with specific characteristics. In addition, we have known for a long time that deficiencies in minor elements such as zinc, boron, copper and manganese limit the development and yield of crops.



Micronutrients

The minor granular elements added at a rate of a few kilograms per ton of fertilizer are poorly distributed in the fertilizer strip and therefore inefficient. This is why our 5 Star programs have integrated the Microsyn technology which consists of coating each granule with minor elements. This ensures an even distribution on the ground of these elements.



5★ Micronutrients
coated on each granule

Technologies

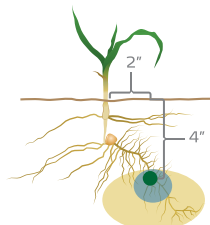


Granular micronutrients
in mixture (lb/acre)

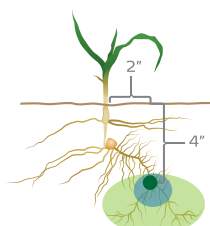
ACCORDING TO IDENTIFIED NEEDS BY A THOROUGH SOIL ANALYSIS, TO FULLY SUPPLEMENT THE DEFICIENCIES IN ZINC, BORON, COPPER, MANGANESE

convincing results in corn

Root difference at V2
In 2X2 placement

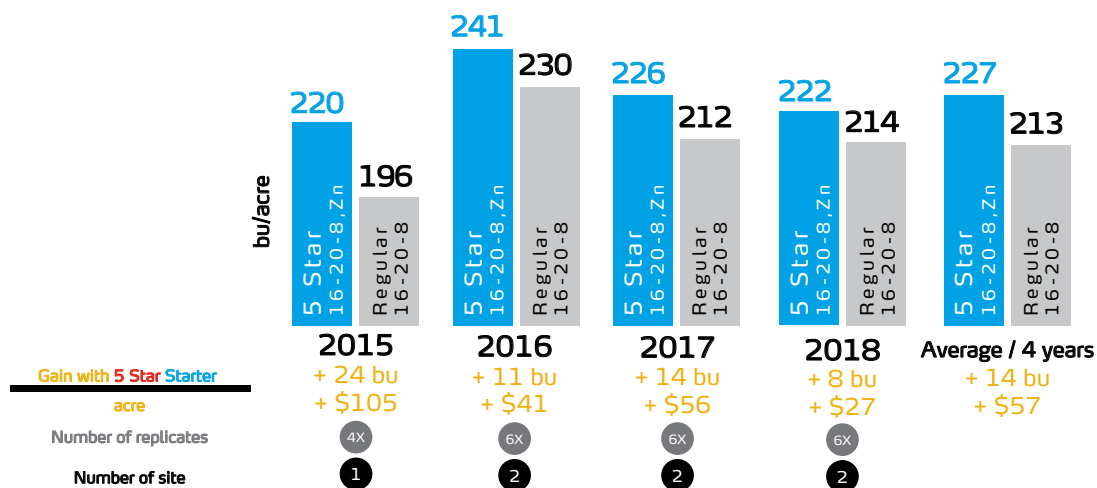


Base : CAN + DAP



5★

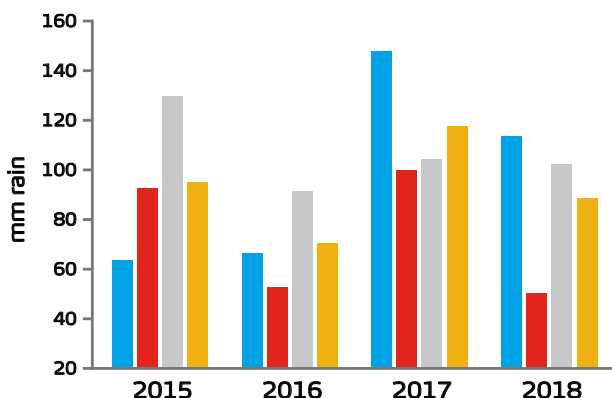
GRANULAR 5 STAR STARTER WITH MICROSYN TECHNOLOGY vs REGULAR CAN-DAP



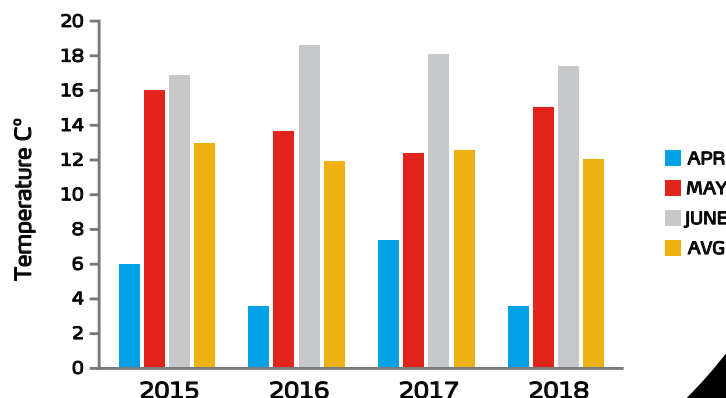
• Site: Saint-Hyacinthe
• Source: R&D Synagri
• Corn at \$4.95/bu

The results show a higher profitability with the 5 Star. The gains are not the same from one year to the next. They are more significant in more difficult spring conditions such as in 2015 and 2017 where precipitations in May were above average. Moist soils warm less quickly, limiting the development of roots, hence the importance of providing a top quality starter. The spring of 2018 was the most favorable for root development with a warmer month of May and below average precipitation. This combination has limited the beneficial effect of a 5 Star starter compared to a regular starter, as the roots have benefited from more favorable conditions for their development. Nonetheless, the 5 Star starter was more profitable than the regular starter.

MONTHLY PRECIPITATION (mm)



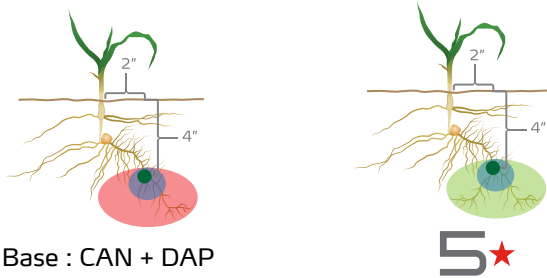
MONTHLY TEMPERATURE (Co)



FERTILIZER 3&5★

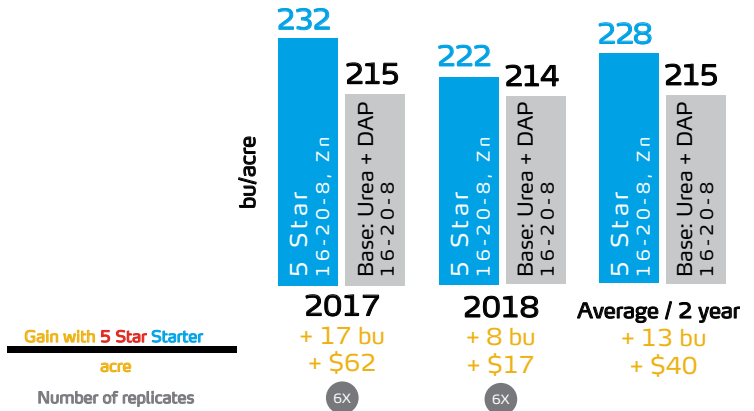
5* granular Starter

Root difference at V2
In 2X2 placement



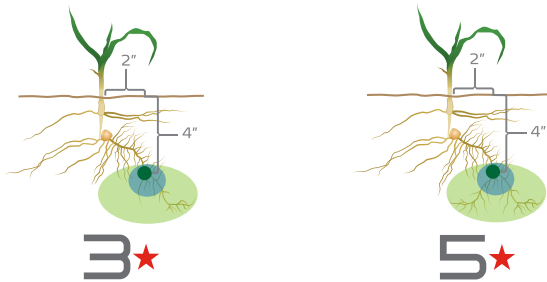
Urea and DAP (diammonium phosphate) tend to promote the presence of ammonia in early root development. The use of these bases as a starter is not optimal compared to the 5 Star that does not promote the presence of ammonia.

GRANULAR 5 STAR STARTER WITH MICROSYN TECHNOLOGY vs REGULAR UREA + DAP



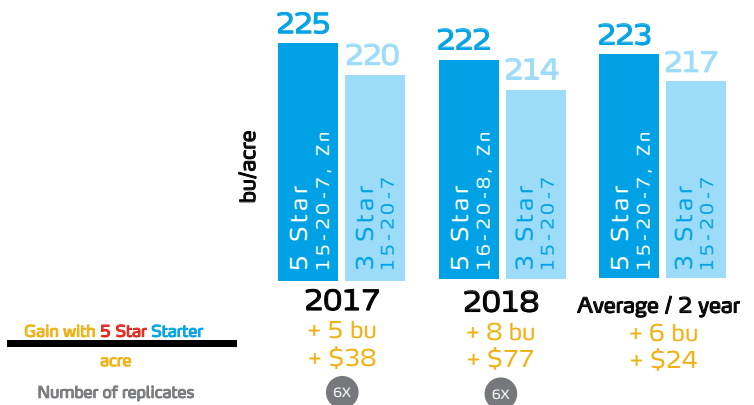
- Site: Saint-Hyacinthe
- Source: R&D Synagri
- Corn at \$4.95/bu

Root difference at V2
In 2X2 placement



In this trial we have compared a 5 Star starter coated with zinc with a 3 Star that has the same attributes, but without the minor elements. Since the soil zinc index is low, the results showed the efficiency of the 5 Star with Microsyn zinc.

GRANULAR 5 STAR STARTER WITH MICROSYN TECHNOLOGY vs 3 STAR





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