

# Technical Bulletin

## SOYBEAN

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synAgri



## Make the Most of the High Soybean Price with an Efficient Starter

### Starter Fertilization in Soybean ?

One of the dilemmas producers face in soybean production is whether to opt for starter fertilization. It all depends on whether the amounts invested will generate an acceptable return on the investment.



Yield increases obtained with a starter vary according to the growing conditions, but with the right starter at the right location, the probability of increased profitability is very high.

This is especially true when the price of soybean is at least \$6.62/bu!

The purpose of a starter with soybean is to promote early and rapid development of roots and leaves, which in turn will be faster and more efficient at nourishing nodules.

It is a well-known fact that early sowing increases the probability of maximizing soybean yields.

This practice strongly encourages the use of a starter, which will help the plant get a quicker start in cooler soil conditions that it would with late sowing.



Development  
**Roots**  
and  
**Leaves**

N

NITROGEN

P

PHOSPHORUS

Nitrogen and phosphorus from the starter promote the development of young roots and leaves. The faster the root system develops, the faster the leaves will be able to increase their photosynthetic capacity thanks to sufficient nutrients. Well-developed leaves will provide the necessary sap to the nodules more quickly without interfering with their development, which in turn will give nitrogen to the plant and so on. Yields are maximized when nodules are able to supply nitrogen faster and in greater quantities to the plant.

# Granular Starter vs Pop-up ?



When a corn planter is used to sow soybeans, granular starters are ideal. With other planters, the use of a system allowing the application of a pop-up for a quicker start is recommended.

Granular starters allow more nutrients to be applied than pop-ups, while further increasing the likelihood of higher yields. Accordingly, the cost is higher, but so is profitability. The choice of products depends on the objectives of the producer and the availability of sowing equipment.

## Several years of testing have shown profitability of a good starter fertilization in soybean production



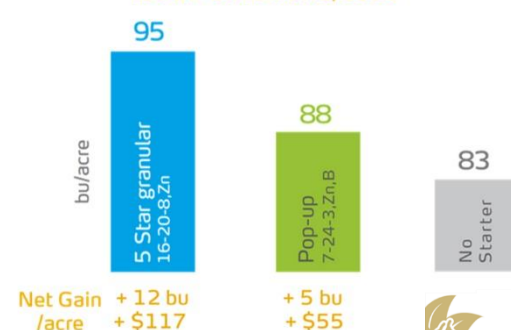
On the basis of a price of \$6.62/bu for soybeans, here is an overview of the increase in yield that must be obtained before the investment is profitable. This is called the break-even point. Once the minimum increase is reached, the extra kilos of soy are net gain. Obviously, the higher the yield potential of the field, the more it makes sense to invest in a more efficient starter.

Starter cost/ac	Minimum yield gain (bu/ac)
\$60	3.72
\$40	2.47
\$20	1.23
\$10	0.62

5 STAR GRANULAR STARTER WITH MYCROSYN TECHNOLOGY vs NO STARTER



5 STAR GRANULAR STARTER WITH MYCROSYN TECHNOLOGY vs POP-UP vs NONE, 2018



• Site : Saint-Hyacinthe  
 • Source : R&D Synagri  
 • Soybean at \$6.62/bu

We have conducted tests for four years and they have shown that the judicious use of starters can significantly increase profitability at normal soybean prices. With a soybean price of \$6.62/bu, the **average net gain** determined when taking into account the price of the starter and additional costs related to marketing due to increased yields (transport, storage, drying, etc.) is very impressive at **\$73/ac.**