

# Optimize<sup>®</sup> FXC DS

## For Soybean

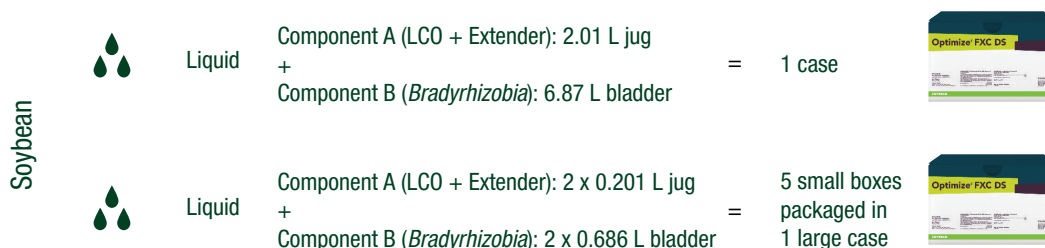
### FASTER NODULATION, STRONGER SOYBEANS, BETTER YIELDS

#### Key Benefits:

- Highly effective dual-strain *Bradyrhizobium*
- Fortified powerful signaling molecule, LCO Promoter Technology™, to initiate nodulation and increased consistency across a range of environmental and soil conditions
- Broad compatibility with 120 days on-seed with most seed treatments, and 220 days on-seed with an additional extender
- Retailer applied on-seed liquid formulation

#### Formulation:

Liquid



#### Application Rates & Directions:

| Package    | Content                                                                                                    | Volume of Seed Treated |        |
|------------|------------------------------------------------------------------------------------------------------------|------------------------|--------|
|            |                                                                                                            | Units                  | lb     |
| Large Case | Component A (LCO + Extender): 2.01 L jug<br>Component B ( <i>Bradyrhizobia</i> ): 6.87 L bag               | 400                    | 20,000 |
| Box        | Component A (LCO + Extender): 2 x 0.201 L jug<br>Component B ( <i>Bradyrhizobia</i> ): 2 x 0.686 L bladder | 80                     | 4,000  |

#### Liquid Directions:

- Applied to soybean seed by retailers
- Contact your seed retailer to order
- Inoculate bare seed up to 220 days before seeding
- Seed companies may get planting windows that extend beyond the standard 120-day planting window when Optimize<sup>®</sup> FXC DS is applied with a seed treatment
- Read the label before application for complete use instructions

In farming, a strong start to the season often sets the stage for how well crops will finish. That's where LCO Promoter Technology™ comes in, giving plants the boost they need right from day one.

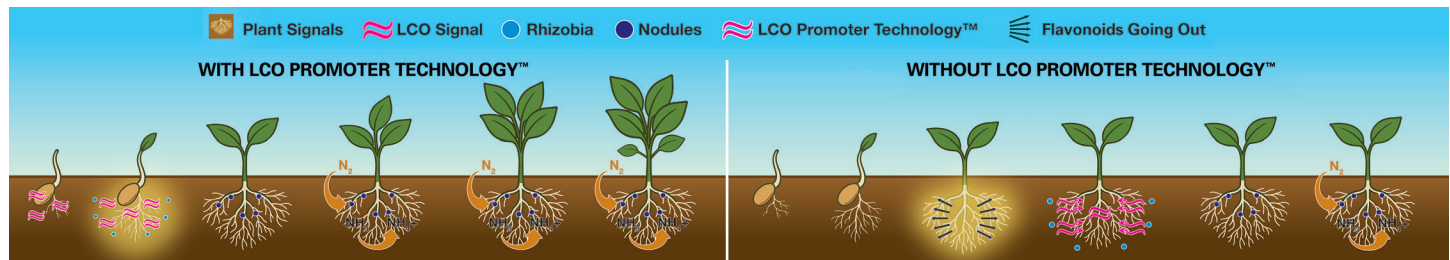
## What is LCO?

LCO stands for lipo-chitoooligosaccharide, which is a naturally occurring signaling molecule produced by beneficial microbes like rhizobia and mycorrhizal fungi. These signals are crucial for forming symbiotic relationships that enable plants to access essential nutrients.

## How LCO Works for Rhizobia

In a typical legume crop, the plant sends out signals called flavonoids to attract rhizobia, the bacteria that help fix nitrogen. Once they get the message, rhizobia sends back an LCO signal that tells the plant that they are a match and signals to the plant to start preparing for the rhizobia to enter.

By applying LCO Promoter Technology™ right at seeding, the conversation gets an early start. Nodulation occurs sooner, nitrogen starts moving faster, and the crop is off to a stronger start, regardless of the soil type, temperature or variety.



## How LCO Supports Mycorrhizal Fungi

LCO also plays a critical role in helping plants connect with arbuscular mycorrhizal (AM) fungi. These fungi release LCO signals known as Myc factors, which trigger the plant to prepare the roots for colonization.

Once colonized, the fungi act like an extended root system, reaching into tiny soil pores to draw in water and essential nutrients that roots can't get on their own, which is especially important in low-phosphorus prairie soils.

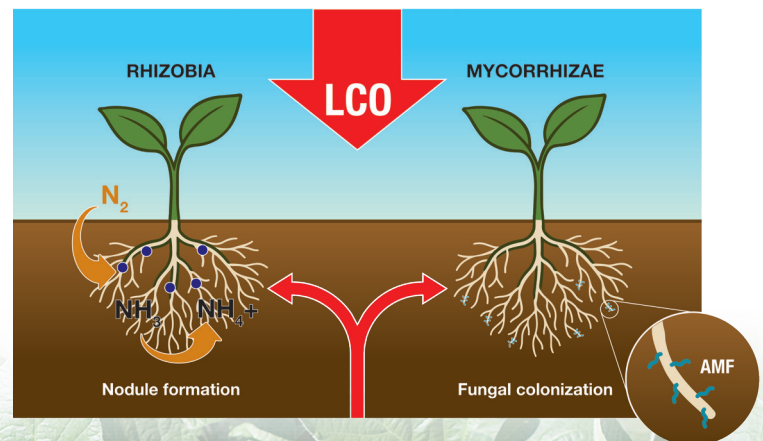
Both rhizobia and AM fungi activate the plant's SYM (Symbiosis) signaling pathway, a built-in response that prepares roots for beneficial microbial entry. LCO Promoter Technology™ taps into this shared communication channel, allowing earlier and more efficient symbiosis.

## Benefits for the Plant

- Fix nitrogen sooner
- Access water and essential nutrients faster
- Build stronger roots
- Tolerate stress from heat, drought, and poor fertility

## The Bottom Line

LCO Promoter Technology™ helps plants do what they're already designed to do, just faster and more effectively. And that stronger start can lead to a stronger finish.



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