

# Agronomic Special Report

## Phosphorus: An Essential Need for Potatoes

Phosphorus, as a nutrient, promotes early emergence and root development while optimizing tuber initiation and growth. The stronger the plant, the greater its yield potential. Ensuring phosphorus availability is therefore critical.

## The Advantage of Foliar Phosphorus Application

Agro-100 conducted a 10-year longitudinal study on the foliar application of phosphorus in potato crops in the Lanaudière region. The findings demonstrate that over the 10 years of trials, potato yields were significantly influenced by foliar phosphorus application. Phosphorus absorption through the foliage ensures the nutrient's effectiveness and availability to the plant. Results showed an average additional yield increase of 11%, with greater uniformity and a higher quantity of tubers measuring 2.25 inches or more. See the table below for more details.

## Application

In the trials below, three treatments of Agro-Phos (at a rate of 5 L/ha in 100 L of water) were applied at intervals of 10 to 14 days.

- The first treatment, at the start of tuber initiation (approximately 35 days after emergence), significantly supported plant growth.
- All three applications were designed to ensure an adequate phosphorus reserve throughout the season, leading to improved yields.

Agro-Phos is compatible with most fungicides registered for potato crops.

Agro-Phos: A Guarantee of Quality and Uniformity for Potato Crops!

Essais 1997-2006	Agro-Phos 0-29-5 + 4% Mg
	Pomme de terre / Potatoes
Prix récolte / Commodity price *	10,00 \$/quintal
Augmentation du rendement / Augmentation du rendement	33,0 cwt/acre
Nombre d'essais scientifiques	102
Pourcentage gagnant / Win Percentage	97%
Revenu Supplémentaire / Extra Revenue	330,00 \$
Coût de la technologie / Cost of technology	61,20 \$/acre
Marge Supplémentaire / Extra margin	268,80 \$
ROI	5,4 à 1
Valeur de la récolte / Value of crop	10,00 \$/quintal
Rendement supplémentaire requis pour payer la technologie / Extra yield necessary to pay product	6,12 quintaux

Essais effectués sur 23 cultivars de pomme de terre / Trials conducted on 23 potato cultivars

