

NUTAC[®]

High-performance Spray-dry Foliar Nutrients



Designed to boost yield and quality

SOTUS AND THE HISTORY OF SPRAY-DRY TECHNOLOGY IN FOLIAR NUTRITION

SOTUS

- A leading agrochemical and foliar nutrition products manufacturer and marketer in the Asia Pacific region
- A history of rapid and consistent year-on-year growth in the Thai markets since 1996
- A focus on ag specialties and collaboration with leading multinational suppliers
- Received the 2011 AGROW AWARD for “Best Company from an Emerging Region”
- To be a world leading producer of unique spray-dry foliar nutrition products



HISTORY OF SPRAY-DRY TECHNOLOGY

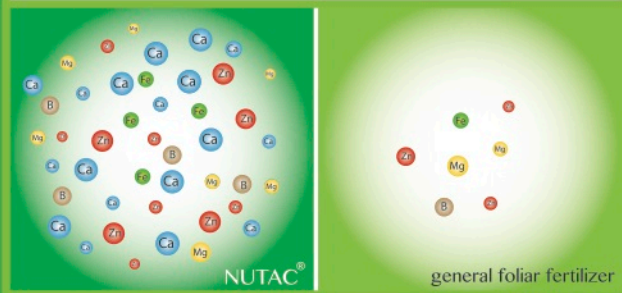
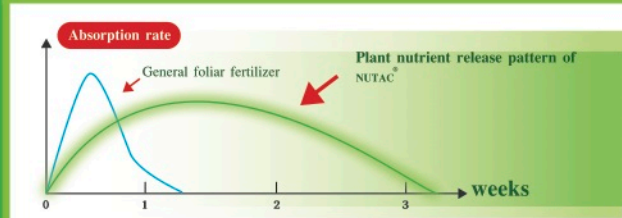
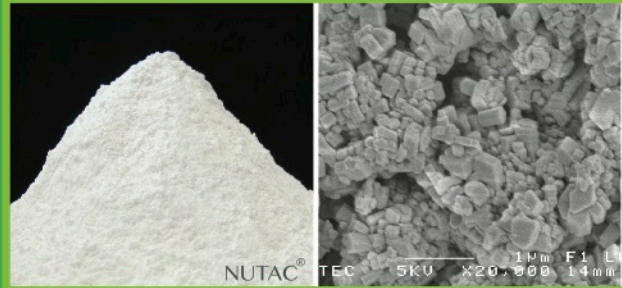
- In 1938, Dr. Leffingwell in California invented the first neutral copper foliar nutrition product for citrus – a precursor to spray-dry neutral powder products
- In 1957, Dr. Turrell of University of California (Riverside) researched with radio-isotope technology on a spray-dry foliar nutrient formulation containing Zn-P complex. He confirmed the solubility, absorption, translocation and crop safety aspects of the product and soundness of the technology. This is the fundamental technology that is now employed in NUTAC[®]
- Sotus has been a successful manufacturer and marketer of NUTAC[®] high-performance spray-dry foliar nutrients, first in Thailand and now in the Asia Pacific region



NUTAC[®] SPRAY-DRY TECHNOLOGY




- Nutrients are chemically reacted to form complexes
 - The unique and sophisticated manufacturing technology ensures a product that has unique features and benefits critical for yield and quality enhancement
- ➔ Dry wettable powder in the form of fine particle size (1-5 microns)



FEATURES AND BENEFITS OF SPRAY-DRY TECHNOLOGY

- **Homogeneous and non-hygroscopic product**
 - Safe to crops
 - Free-flowing powders
- **Fine particle size**
 - Better adhesion to leaf surface
 - Better rain-fastness
- **Slow-release**
 - Allows treated plants to feed over a two to four week period
- **High nutrient loading products**
 - Provides treated plant with adequate and optimum nutrients at critical growth stages
- **Non-chelated products**
 - Allows easier foliar uptake of nutrients
 - Avoids creating nutrient deficiencies
- **Nutrients released are in the exact form utilized by plants**
 - More rapid and efficient utilization of the nutrients
- **Designed scientifically to boost yield and quality**
 - High P and Zn contents in products
 - P to supply the energy and Zn to act on the enzymatic system

NUTAC[®] SPRAY PROGRAM

Key NUTAC[®] foliar nutrition concepts

Apply a specific NUTAC[®] product at each critical growth stage of plants

➔ Ensuring optimum nutrition at all critical growth stages

	Apply NUTAC [®] Super-N and/or NUTAC [®] Balance for better vegetative growth
	Apply NUTAC [®] Super-N and/or NUTAC [®] Balance for leaf development
	Apply NUTAC [®] Super-K just before flowering stage for flower induction
	Apply NUTAC [®] Super-N and/or NUTAC [®] Balance for preventing fruit drop and increasing fruit size
	Apply NUTAC [®] Super-K and/or NUTAC [®] Balance for yield and quality improvement



EMPHASIS ON FAVORABLE RETURN ON INVESTMENT

Key NUTAC[®] concepts

A technology to improve farmers' plant nutrition program

- ➔ Focus on Return On Investment (ROI)

Use in spray programs to optimize feeding at critical growth stage

- ➔ Designed to boost yield and quality

Key crops	BENEFITS
	<ul style="list-style-type: none"> ● To reduce fruit dropping ● To increase yield ● To improve quality and storageability
	<ul style="list-style-type: none"> ● To increase uniformity in maturity ● To increase fruit size ● To improve color and quality
	<ul style="list-style-type: none"> ● To increase fruit setting ● To increase fruit size ● To improve yield quality
	<ul style="list-style-type: none"> ● To improve growth uniformity ● To increase yield ● To improve harvest quality

