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Operations in
more than
50
countries



Sales to
more than
150
countries

Yara's market presence includes a global network of sales offices in more than 50 countries and sale to more than 150. The company has a strong production and marketing base in Europe and has greatly extended its presence in North and South America, not least taking a strong position in Brazil, as well as in Australia, while expanding in Africa and Asia.

Market Knowledge

Yara delivers a wide range of solutions for the world's farmers and industrial users, leveraging its experience and knowledge to tailor solutions to local needs. With regard to Agricultural Solutions, Yara offers the market's most complete portfolio of mineral fertilizers and solutions for sustainable agriculture - covering all necessary nutrients for most crops.

Creating Impact

Yara commits to a sustainable future. Creating impact is our blueprint to create business value in the way we respond to human challenges. Yara creates value by delivering profitable, sustainable growth benefitting customers and shareholders - as well as society at large. By creating value Yara is positioned to create impact, to make a difference. Successful alignment of the company's current and future core business with global challenges will strengthen the company's position and develop a sustainable competitive edge. Yara creates impact by engaging in three focal areas where it is able to make a profound contribution: food security, resource management, and environmental issues. The three areas are intrinsically linked, and Yara is uniquely positioned to develop viable business solutions that address related global challenges.



Knowledge grows



Tree Nuts

Take advantage of the demand



In the wake of increased consumer demand, nut production in most regions worldwide has risen dramatically in recent years.

This is driven by the fact that nuts are not only one of the most nutrient-dense plant-based foods available, but that they have also been proven in several health studies to reduce risks of heart disease, cancer, and diabetes.

To take advantage of the demand, the aim of every producer should be high yields of good quality nuts.

One of the agronomic factors that can influence nut yield and quality is the application of fertilizer at the right rate, right time, right place using the right source (The 4R principle).

Yara's aspiration is to

- be the leading provider of sustainable (ex. reduced carbon footprint) crop nutrition solutions
- supporting farmer profitability through knowledge, quality, and productivity by applying the 4R principle,
- building a long-term relationship with the client.



YaraRega™
AQUAFLEX™
N, P, K, Zn, B



YaraLiva™
NITRABOR™
N, Ca, B



YaraTera™
CALCINIT™
N, Ca



YaraVita™*
P, Ca, Zn, B

*YaraVita includes a range of specialised products and nutrients and are not limited to the elements mentioned – ask your local Yara Agronomist for more information.

Most required nutrients have specific roles to play in improving nut yield:

Nitrogen (N) is important to build the tree canopy and encourage vegetative growth leading to improved bud formation and higher yields and higher nut protein contents.

Phosphorus (P) is particularly important for root development, flower initiation and energy transport within the tree.

Potassium (K), balanced alongside nitrogen, also boosts growth – including better water utilization. It is

particularly important and needed in large quantities for nut-fill and the highest yields.

Calcium (Ca) helps build strong cell walls and is particularly important for the development of good quality nuts with less disease.

Boron (B) is important for flowering and pollination, to ensure good fruit set.

Zinc (Zn) helps to maintain growth processes especially new tissue development.

Nut quality is also influenced by crop nutrition:

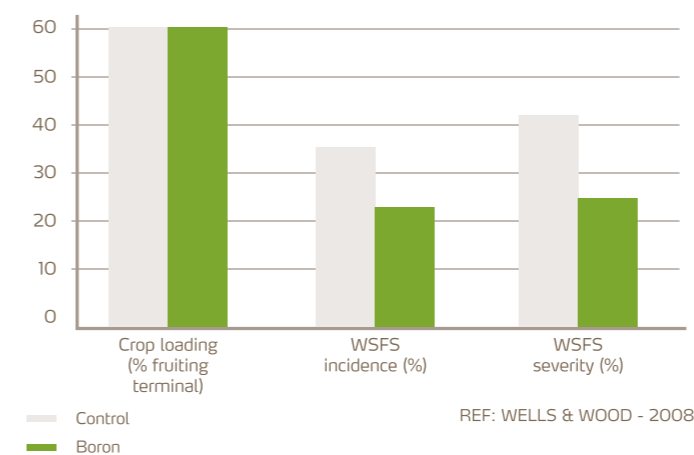
- Calcium (Ca) and potassium (K) help to improve good nut fill and tolerance to disease, reducing molds and storage rots (Fig 1 and 2).
- Boron (B) reduces water stage fruit split in pecans (Fig 3).



Figure 1 - Hazelnut with internal browning (left) vs YaraLiva™ treated (right)



Figure 2 - Hazelnut mold. YaraLiva™ treated on right



(Fig 3) Effect of Boron on water stage fruit split - pecans - USA



Carbon Footprint

Yara believes that sustainable agriculture is needed to meet the growing world population's food and energy demands because mineral fertilizer inputs will still be required. However, these products need a low carbon footprint to reduce their environmental impact.

By investing in new 'best available technology' (BAT) that minimizes its carbon footprint, Yara's manufacturing plants are rated amongst the most energy efficient in the world.

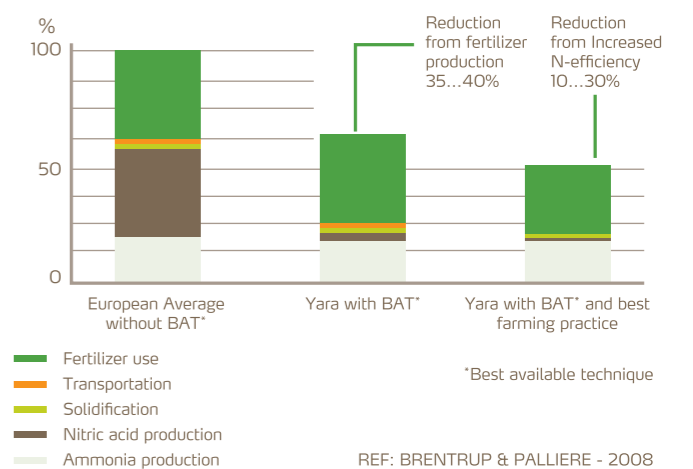
By developing and implementing improved catalyst technology, Yara has reduced N₂O emissions from its nitric acid plants by as much as 90%. This reduces the carbon footprint of the nitrate containing fertilizers the company produces by 40% (Figure 1).

Furthermore, by enhancing N efficiency in fertilizer use – through proper selection and use of these nitrate-based fertilizers growers can go further, contributing another 10-30% in terms of carbon saving.

In contrast, ammonium N sources release N₂O in the nitrification process, giving them a greater carbon footprint than nitrate N based products.

Thus, by selecting and using Yara's lower carbon footprint nitrogen fertilizers, in a targeted manner, producers can effectively reduce carbon emissions from plant nutrition by around 50%.

Carbon Footprint - Ammonium Nitrate Production and Use



Crop Nutrition

The phenological cycle is the primary determining factor for tree nut orchard management and fertilization, and not the calendar.