## BRINSTONE

Sulphur provider company

#### BRIMSTONE TURKEY

SULPHUR BENTONITE

#### The sulphur problem

According to the HGCA, sulphur deficiency continues to become more widespread due to the rapid fall in atmospheric sulphur emissions. They are now one seventh of 1992 levels.

#### Fertiliser requirements:

Сгор	kg SO <sub>3</sub> /ha
Barley	25-50
Wheat	50
Oilseed rape	50-75

HGCA <u>Recommendations</u>, Information <u>sheet</u> 28, 2014

#### Sulphur deficiency means:



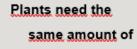
Poorer usage of nitrogen. so poorer yields

> Barley: Poorer malting quality and beer flavour





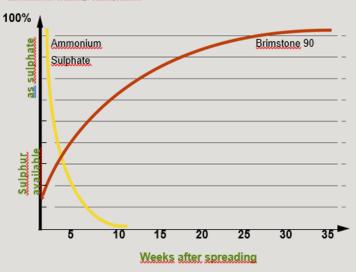






# SULPHUR IS IMPORTANT AND ESSENTIAL FOR SOIL AND CROPS

#### Season Long Sulphur



Brimstone90 is the state-of-the-art in sulphur fertilisers. Not only does it provide sulphur to the crop soon after spreading, but it continues to feed the crop through the growing season.

This makes it the ideal cost-effective solution to the growing problem of sulphur deficiency, which limits nitrogen uptake, impacts grain and oilseed quality and damages yields.

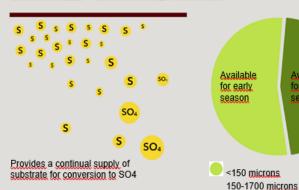
Being 90% elemental sulphur.
Brimstone90 quickly breaks up in contact with soil moisture into fine particles, which then converts steadily in the soil to the sulphate form to be taken up by the plant.
Unlike Ammonium Sulphate, this process results in little risk of leaching.

11.5% bigher yield in 0 SR (Harper Adams trials, 2009/2010)

return 5:1 on investment

#### Optimum particle availability

Brimstone 90 has the optimum range of Sulphur particle sizes providing a continual supply of sulphate through the season



#### Ultimate spreading flexibility

Brimstone90 can be spread at any convenient time in the autumn or early spring – there is no need to wait for a convenient weather window.

Formed in uniform pastilles, dustfree and easy to handle.
Brimstone90 spreads well out to
36 metres. It has been fully tested
by SCS, and calibration settings are
available for all popular spreaders.
Brimstone90 blends easily with
other fertilisers.



#### Minimal leaching



Available for late

season

0.25g S/ pot applied, Leachate S (ppm)
 above Control (no S applied). (Lexington,
 Agriculture Independent Trial 1998)

**BRIMSTONE** 

#### SULPHUR BENTONITE ADVANTAGES FOR SOIL



Sulphur is one of the 4 major essential plant nutrients together with N,P,K, and it contributes to increase crop yields and fertilizer efficiency in different ways- It provides a direct nutritive value.



- It provides indirect nutritive value as soil amendment, especially for neutralizing soils.



- It improves the efficiency of other essential plant nutrients, particularly N and P, through fertilizer reaction and interaction.



- Physical and chemical properties of elemental S and its oxidative compounds in soils could slow and control fertilizer nutrients release for plant uptake during the growing season as well as reduce nutrient losses without environmental risk.

#### WHY FARMERS SHOUD USE SULPHUR BENTONITE?



- It could be good for corns, soybeans, rices, apples, teas, oranges, tobaccos, coffee, potatoes, etc.



- Sulphur Bentonite is a highly concentrated fertilizer that reduces the amount of fertilizer



- No toxic



- Sulphur Bentonite granules are designed and sized to blend well with other

#### SULPHUR AND SULPHATE FORM

- As elemental sulphur is insoluble in water, a pure sulphur pellet would not readily dissolve into soil. Bentonite absorbs water and swells to break up te sulphur granules and provides a high degree of surface area exposure of sulphur to microbes then oxidizes the elemental sulphur into plant useable sulphate.



- Specific type of bentonite, when exposed to water, absorbs moisture and helps sulphur degrade to make efficient conversion to sulphate.



Sulphate is directly available source for plants.



Specifically formulated sulphur fertilizer (0-0-0-90) is designed to quickly degrade, disperse and convert to sulphate throughout the growing season. sulphur converts to sulphate faster than other forms of elemental sulphur for seasonlong nutrition and high vields.



Yearly applications of SULPHUR BENTONITE will improve soil sulphur levels and loss associated with soluble nutrients.



- INCREASES SOIL ACIDITY AND LOWERS SOIL PH



- IMPROVES THE EFFICIENCY OF OTHER FERTILIZERS WHEN BLENDED AND USED TOGETHER.



- INCREASES CROP YIELDS, QUALITY AND HEALTH. IT IS GOOD FOR CORNS, BEANS, RICES, APPLES, TEAS, ORANGES, TOBACCOS, COFFEES, POTATOES AND TURFS



- SUPPLIES SULPHUR TO THE SOIL FOR THE CROP CONTINUOUSLY.



- PROVIDES ALL BENEFITS OF SULPHUR AS WELL AS AN EFFICIENT DELIVERY SYSTEM FOR MICRONUTRIENTS.



- REDUCES COST AND INCREASES ECONOMIC RETURNS.

#### WHY? BRIMSTONE SULPHUR BENTONITE

#### ECOFRIENDLY AND ORGANIC



- HIGH UNIFORMITY AND EFFICIENCY.



- HIGHER SULPHUR CONTENTS.



- LOW TRANSPORTATION AND HANDLING CHARGES



- EASY AND QUICK ACCESS TO SOIL AND PLANT WITH SEASON LONG EFFECT



- ECO FRIENDLY

### GENERAL SPECS OF THE PRODUCT

- Color
- Dark brown (color may vary depending on the material source)
- Shape
- Split pea shaped pastilles
- Sulphur
- 90% ±1
- Bentonite
- **10% +1**
- Size
- Diameter 2.5~5mm / Height 1.4~1.8mm

#### BRIMSTONE SULPHUR BENTONITE KEY FEATURES



Guaranteed analysis of 90%



Increased nitrogen utilization, phosphate and micronutrient uptake



Resists leaching until converted to sulphate form



Industry leading quality and product uniformity

## BRINSTONE

Sulphur provider company

THANK YOU FOR YOUR ATTENTION EMN@BRIMCO.CO
EFE MUNIP NURDOGDU
IZMIR / TURKEY