



# HUMIC SCG



## SPECIALLY FORMULATED FOR UK GRASSLANDS

A worthwhile and cost effective method of improving soil drainage and reducing water logging and compaction

We Know How Compacted Soils On Your Farm Costs You Money  
We Also Know How Using *Humic SCG* Can Lessen Compaction

Water must be able to move freely in the soil - both down in times of high rainfall and back via capillary action in times of drought. Water logged or drought prone soil is most likely to be suffering from compaction. A well-structured soil will hold water and oxygen in the correct amounts allowing plants to breath. This also encourages production of the vast array of beneficial micro-organisms that will go a long way towards feeding your crop most of its nutrient requirements. Many of the best soils have critical water management problems that must be solved before the most efficient production can be achieved. Applying *HUMIC SCG* will help excess water to move through the soil allowing in the air with the subsequent benefits of improved biological activity and humus building. *HUMIC SCG* is a worthwhile and cost effective method of improving soil drainage and reducing soil shear strength.

FROM THIS.....



.....TO THIS



### BENEFITS:-

- Increased Water Infiltration
- Increased Yield Potential
- Increased Growing Season
- Increased Nutrient Availability
- Increased Biological Activity
  
- Decreased Water Logging
- Decreased Risk of High Fluke
- Decreased Acidity
- Decreased Hard Compacted Soil
- Decreased Fertiliser Requirements
- Decreased Nitrogen Loss

## WATER IS THE KEY TO GRASS MANAGEMENT

RURAL LIQUID FERTILISERS PRODUCT - HUMIC SCG



Above:- David Stebbings - Hoardweel Farm

*"I used **Humic SCG** on two very different grassland areas, one a very heavy field that water logged easily, which sickened the grass. After aerating and using the **Humic SCG** grass is much thicker and greener, is loamy and no longer becoming water logged.*

*The other area is a very steep hillside that I cant get muck on, which dries out easily and doesn't grow grass well. The difference there is amazing, there is definitely more grass, less gaps and the grass is better quality. I know it's the **Humic SCG** because I only had enough to do half of the hillside and the other half is still struggling to grow grass!"*

**SPECIALLY FORMULATED  
FOR ALL UK GRASSLANDS**

**CAN BE USED AS PART OF**



**THE BETTER GRASS PROGRAM**

# **WATER IS THE KEY TO GRASS MANAGEMENT**

# ***HUMIC SCG* IS THE KEY TO WATER MANAGEMENT**

**Water must be able to move through the soil easily, both down in wet periods (heavy rain and winter) but also up by capillary action in times of drought and low rain periods.**

Grass roots will not thrive in a soil that is waterlogged. This is often when disease will set in and growth will be stunted and weak. Nutrient availability and uptake is dependent upon aerobic conditions and the work of beneficial micro-organisms in the soil.

*Humic SCG* can be used to improve water infiltration, by breaking down the adhesion forming compaction. It stimulates root development, thus improving aeration and allowing the roots to obtain essential nutrients, thereby encouraging and increasing biological activity.

*Humic SCG* contains a unique formulation of Soil Emollients and Natural Humic Acids with a range of biological and natural plant growth stimulants, that will improve soil life and increase Humus levels. Together, these will produce a stronger and healthier grass that is less susceptible to disease in a soil that drains more freely, allowing quicker access after watering or wet weather.

## **There are two major problems in grass management:**

### **1. COMPACTION**

Compacted soils have reduced pore spaces - therefore less room for water, air and beneficial micro-organisms causing anaerobic conditions. This creates the wrong environment for beneficial soil micro-organisms. Soil pathogens then take over to attack the roots of the plant.

*HUMIC SCG* produces a stronger and healthier grass that is less susceptible to disease in a soil that drains more freely, allowing quicker access after wet weather.

### **2. WATER RETENTION**

Causes similar problems to the above but the soil need not be compacted for this to happen. Imbalances of Calcium to Magnesium can cause this problem.

*HUMIC SCG* contains a unique soil conditioning agent which allows water to move easily through the soil, improving water infiltration and increasing aeration.

***This product contains soil conditioners designed to increase water infiltration, increase depth of rooting and improve soil structure.***

# The Ionic Nature of Soils

Particularly clays and the polarised molecular structure of water results in strongly bonded water in the soil system. It is the strength of this soil-water adhesion which leads to soil compaction thus resulting in poor water infiltration, low overall water capacity, reduced soil aeration and high shear strength.



*Above: Shows poor soil structure on right*

Compacted soil reduces air space which will inhibit beneficial micro-organisms. The soil will tend to go hard when dry and hold excess water at other times. An application of **HUMIC SCG** will penetrate to depths of three to four feet and by doing so will improve porosity by up to 30%.

One of the most readily observed results of a treatment of **HUMIC SCG** is improved water infiltration rates. By reducing the adhesion which produces compaction of soil into rigid structures, particularly into a hard pan layer, the Soil Conditioner readies the soil for much deeper and faster influx of water. The increased penetration of water results in reduced run-off and standing water in previously wet areas.

Soils that have the correct balance and ratio of nutrients, together with an active humus content, are said to be fertile. Fertility is not an accident and does not in itself guarantee high yields. The highest yields will always come from crops that have been subjected to the least amount of stress and most stress comes from either too much or too little water which will result in too much or too little oxygen in the soil.

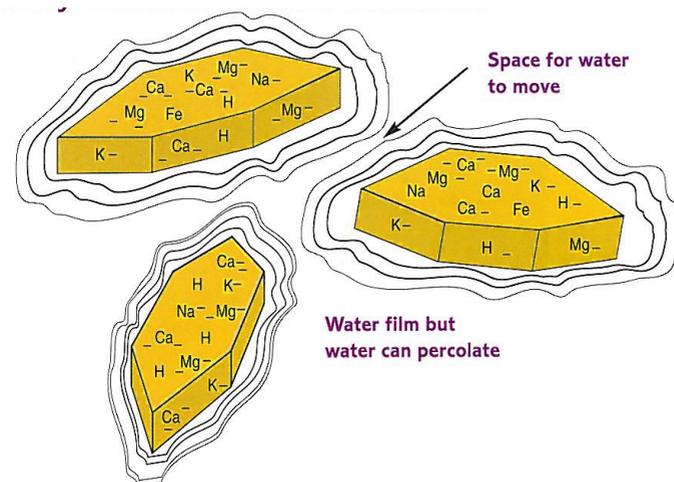
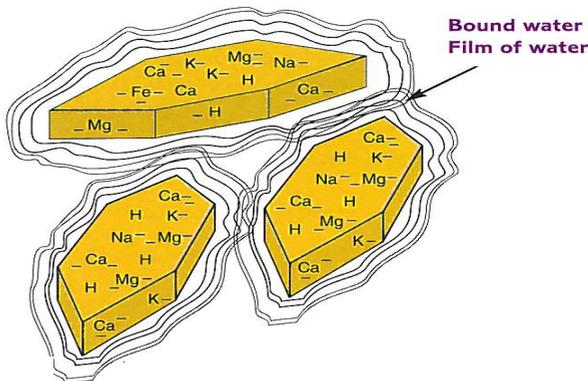
# How *HUMIC SCG* Works in the Soil

## Compacted Soils

## Clay Fractions/Soil Colloids

Clay colloids have varying amounts of negative charge. These negative charges attract to and hold the positive charged ions called Cations. The Cations are made up of  $\text{Ca}^{++}$ ,  $\text{Mg}^{++}$ ,  $\text{K}^+$ ,  $\text{H}^+$  plus some of the trace minerals and  $\text{Fe}^{+++}$ .

The water in the soil ( $\text{H}_2\text{O}$ ) can also be attracted to the colloid and a film can be formed around the clay particle. This film may attract and pull other colloids creating a 'bound water' which will cause the soil to become anaerobic (lacking oxygen). This bound water also reduces the water movement 'percolation' and will restrict root development.



*HUMIC SCG* is anionic (negatively charged) and with the polymer and glycols is able to release this trapped water. As the water moves out and oxygen goes in, the soil colloids will move apart, creating pore space. This porosity creates conditions that allow the beneficial micro-organisms to build the humus in the soil.

Once you have humus created - your soil structure will improve, plant nutrient availability is increased and grass yields go up.

# Liver Fluke

The Liver Fluke is an ever-present parasite, affecting the health and welfare of cattle world-wide and is estimated to cost the UK agriculture industry £300 million a year. Evidence seems to suggest that the prevalence of the infection has increased considerably in recent years.

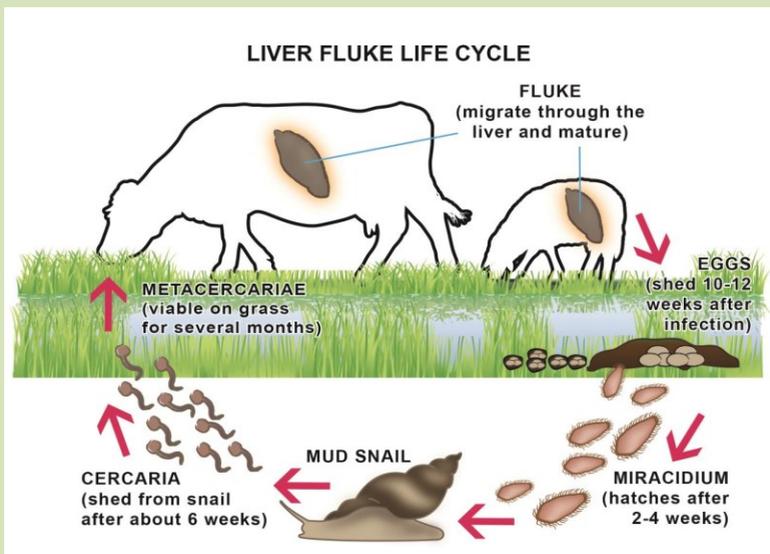
Liver Fluke disease (Fasciolosis) is caused by the trematode parasite *Fasciola hepatica*. Disease can result from the migration of large numbers of immature flukes through the liver, or from the presence of adult flukes in the bile ducts, or both. Liver Fluke can infect all grazing animals (and man) but mainly affects sheep and cattle. The parasite requires a host body - the mud snail *Galba (Lymnaea) Truncatula*, which resides in muddy, slightly acidic conditions, particularly areas associated with poor drainage, meaning the incidence of liver fluke is far greater in the wetter areas of the country and in years when there is high rainfall.

With the capacity of the snail to multiply rapidly (100,000 offspring in 3-4 months) along with the multiplication of the parasite within the snail, there is potential for very large numbers of parasites.

Adult fluke lay eggs that are passed out onto pasture in the faeces. At suitable temperatures a miracidia larva develops within the egg, hatches and migrates in thin films of moisture, actively seeking the snail host. Within the snail they undergo two further development stages, including multiplication, eventually becoming infective cercariae larvae, which emerge from the snail when the temperature and moisture levels are suitable and migrate onto wet herbage.

The hatching of fluke eggs and the multiplication of snails depend on adequate moisture and temperatures greater than 10°C. Such conditions usually occur from May - October in the UK.

In wet summers, snail populations multiply rapidly and snails are invaded by hatching miracidia from May - July. If wet weather continues, the snails shed massive numbers of cercariae onto pasture during July - October. Conversely, if the climate in May - July is dry or cold, few snails appear, fewer fluke eggs hatch and levels of contamination in the autumn are much lower.



Information as given in 'The Liver Fluke (and Rumen Fluke) section of 'The cattle parasites technical manual' and 'S.C.O.P.S.'

Use **HUMIC SCG** to reduce the risk of Liver Fluke by reducing the amount of standing water in your fields.

# It is time to make your choice.....



If your grassland looks anything like the one above you need to address the problem and use **Humic SCG** to get the water moving.

How would you like your stock to live.....

.....LIKE THIS?



.....OR LIKE THIS?



# HUMIC SCG

## HOW TO USE:-

Apply 5 litres per hectare in 150 litres of water direct to grass or soil early autumn to improve soil conditions and reduce surface water over the winter period

In seriously compacted and water logged areas this first application should be used at 10 litres per hectare ~ Please ask your Soil Fertility Specialist

Re-Apply  
5 litres per hectare  
direct to grass and soil in  
March/April

**AVAILABLE IN 1000 litre IBC's  
and 20 Litre PACK SIZES**

**CONTAINS NATURALLY OCCURRING PLANT EXTRACTS  
WITH ADDED BIOLOGICAL STIMULANTS**

Including Fulvic and Humic Acids and Natural Composted Percolates. Also contains many Vitamins and Plant Growth Stimulants with a range of proteins and carbohydrates all designed to feed the soil. **HUMIC SCG** also contains a clever formulation of anionic Glycol's with Block Polymers and Succinates to improve water infiltration and act as a soil emollient (softens the soil and improves biological activity).

**HARMLESS AND BIODEGRADABLE**

**IT WILL NOT HARM WATERWAYS OR ANIMAL LIFE**

For more advice or to place an order

**Telephone: 01366 384899**



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**UK CENTRE FOR BIOLOGICAL GRASSLAND**  
Promoting Bio-**LOGICAL FARMING** Solutions

