



A clear glass filled with water, with a stream of water being poured into it from above, creating a splash and many bubbles. The word 'WATER' is overlaid in large, bold, blue capital letters across the middle of the glass.

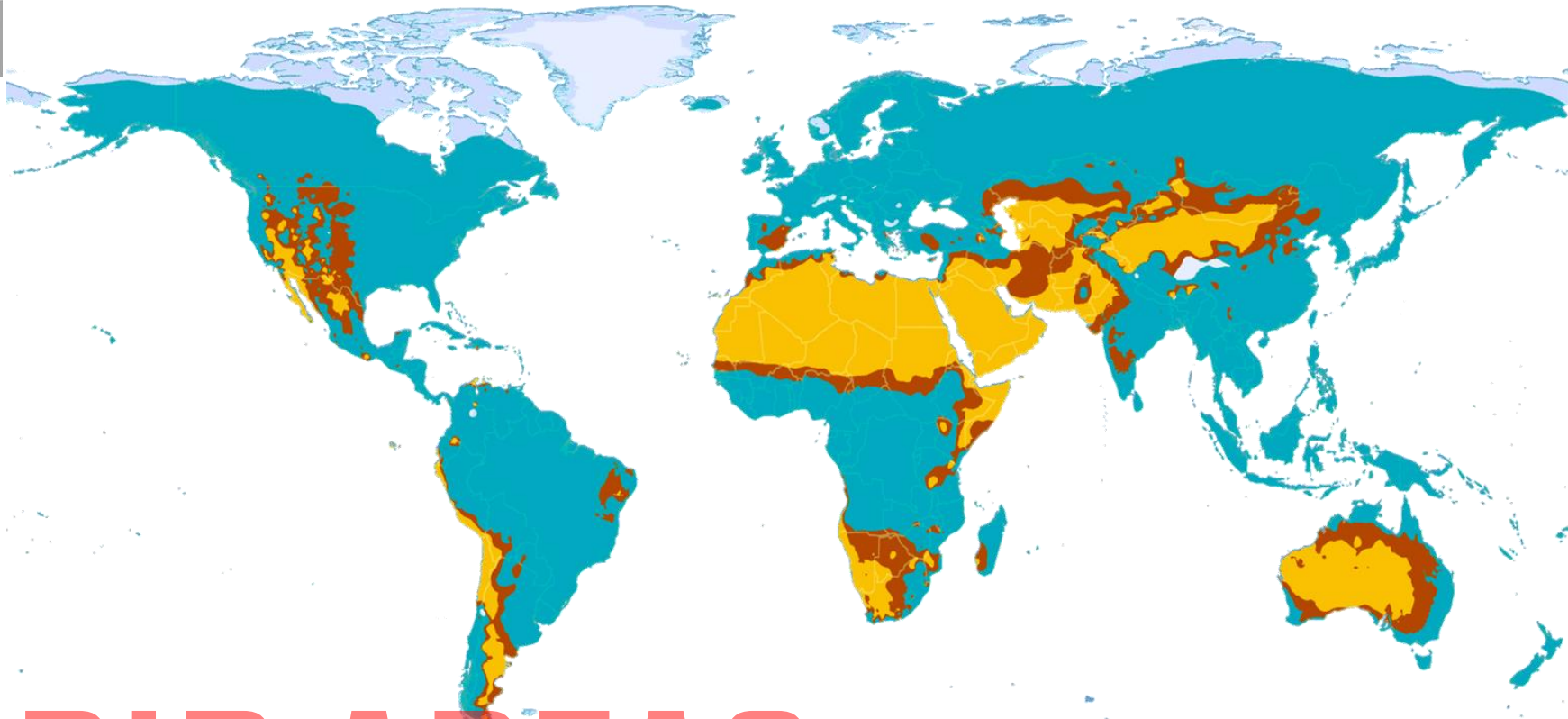
# WATER

Will be more valuable  
than OIL in the near  
future!



...is faster than our population grows.  
The fight for water has started!

# DESERTIFICATION



# ARID AREAS

... today in yellow and in red tomorrow. A 30% increase (at least)!



# WHAT DO WE NEED

- Less water consumption to grow any kind of plants
- Higher harvest rates on the same field size
- Stronger root base to strengthen the soil against erosion
- Less use of fertiliser







# OUR OFFER

- Water Saving at least 80%
- Up to 50% higher harvest rate
- Faster root growth
- Nutrients are retained in the soil





# OUR SOLUTION GR42

- **GR42** is a multi component capillary-structured product
- Singular use, e.g. for trees, last up to 6-8 years
- **GR42** is easy to handle, training time is short
- The microbiology of the soil is supported
- **GR42** improves the soil quality
- Considerable reduction of fertiliser





# OPERATIONAL PRINCIPLE

## Without GR42

More than 90% of the water rinses into the soil. The plant cannot use that water.  
Normal soil has no storage capability. Through evaporation there is a risk of rising salt in the soil.



## With GR42

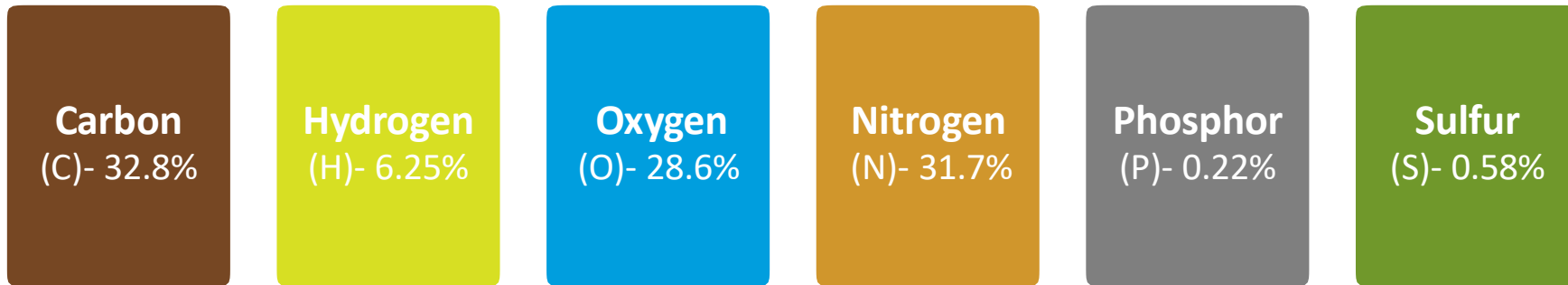
High water retention (700L per cbm).  
Steady volume after water absorption.  
No need of second application.  
Acts as a barrier against rising salt tables.







# CHEMICAL BREAKDOWN



## GR42

- Carbon is required for stabilisation of the Urea compound
- Micro nutrients get released into the root zone within the full lifespan of decomposition





# GR42 FACTS 1

## Proven figures

- 80% survival rate of new planted trees in the desert by only 20% of the normal water consumption (Australia)
- Only 20 % water consumption with up to 50% higher growing rate and roots doubled in strength (Bahrain)
- A test field with various different kind of crops shows dramatic difference in the growing rates (up tp 150%) by equal water supply (India)



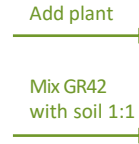
1: Sand/Soil



2: GR42®



3: Mix



4: Add mixture to plant



# GR42 FACTS 2A

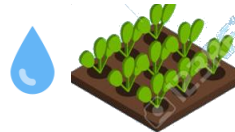
Calculation example land / water:

- A field in the size  $X \text{ m}^2$  needs  $Y$  litres water per year to harvest a 100%
- With GR42 you save 80% water, so you can use the same amount of water for  $X \text{ m}^2 * 5$

without



with GR42



or with GR42



# GR42 FACTS 2B

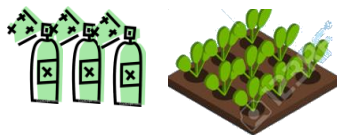
## Calculation example fertiliser:

- By saving 70% fertiliser, you can cover a 330% bigger field with a 100%
- Than 30% \*5 times bigger field = 150%, so you need 50% more fertiliser to plant on a 5 times bigger field with the same amount of water.

or with GR42



without



with GR42



# GR42 FACTS 2C

Calculation example for the harvest with the same amount of water:

- The harvest rate is 50% higher on the original sized field , so in total, with the same amount of water, you can achieve a harvest of 750% with 50% more fertiliser.
- GR42 can be financed through savings in water/fertiliser and profits from an increase in Agricultural yield.

without



with GR42







## Study Murdoch University Australia:

A comparative study to determine the benefits of using GR42 when planting Western Australian native plants and crops in local sandy soils was carried out at the Environmental Technology Centre of Murdoch University in Perth, Western Australia, with exciting root growth, chlorophyll content and leaf mass outcomes.

# Root Development





# Root Development after 3 weeks

Without GR42

With GR42







# Agriculture

**Extremes in HARVEST PER TREE/YEAR\***

without GR42

**62 KG\***

with GR42

**156 KG\***

\*per Year



with GR42

**Growth success of cucumber**

without







Our Australian branch carried out a comparative study with a nursery . . :

After 3 months of intense weather conditions we have noticed healthier, vibrant and more resilient plants on the site treated with GR42. The nursery not only saves a tremendous amount of water, the plants are ready for sales far quicker and the healthier plants are more valuable.

# NURSERY







## Our Production

- Full or half automated process control „Made in Germany“
- Excellent German technology and know-how experienced engineers

# Production Plant







# SUMMARY

80% WATER SAVING

UP TO 250% BIGGER ROOTS

70% LESS FERTILISER

UP TO 50% MORE HARVEST

LONGLASTING EFFECT, UP TO 8 YEARS

NON-TOXIC FOR THE SOIL AND PLANTS





# THANKS FOR WATCHING

LET US REGAIN LAND FROM THE DESERT

SAVE WATER FOR OUR CHILDREN

INCREASE THE HARVEST ON OUR FIELDS

WITHOUT HARMING THE ENVIRONMENT

LET US INVEST IN OUR FUTURE

KIND REGARDS

DIRK BERTELMANN [d.bertelmann@greengeoearth.com](mailto:d.bertelmann@greengeoearth.com)

