



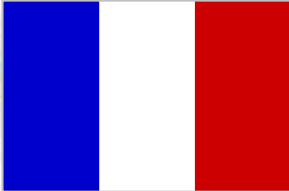
TerraCottem<sup>®</sup>, Leading soil conditioning technology



TERRACOTTEM<sup>®</sup>

## SUMMARY TRIAL REPORT

# The Use of TerraCottem<sup>®</sup> Universal in dune stabilisation



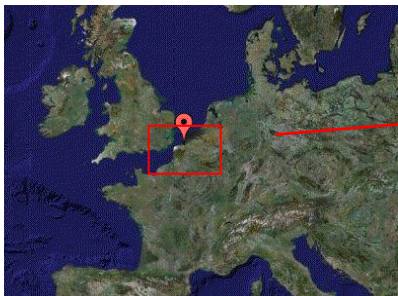
Zuydcoote, France

The principal problem with sandy, poorly structured soils found in coastal dunes is that they are characterized by a deficiency of organic matter and nutrients, both of which are essential in creating well-structured soils for plant growth. Furthermore, such soils are prone to drying out due to evaporation and deep percolation, and are sensitive to damage from wind and water erosion. This makes it very hard, if not impossible, to create a vegetation cover. When using the soil conditioner TerraCottem<sup>®</sup>, the capacity of these soils to retain water and nutrients is significantly improved. Furthermore, biomass production and plant growth are promoted.

## Zuydcoote, France

### 1. Location

Zuydcoote (59) is located in Northwest of France, near the English Channel.



### 2. TerraCottem<sup>®</sup> Universal – treatment

The Zuydcoote council made various attempts to create a vegetation cover on its beaches' sandy dunes in order to stabilise the dunes and limit wind erosion. The results did sadly not meet the expectations: the survival rate just reached 60% and the plants remained small. On May 3<sup>rd</sup> 1995, 8000 plants of various grass species such as *Buddleia*, *Tamarix*, *Euvonymus*

were planted on the same spot but this time they incorporated the TerraCottem® Universal soil conditioner into the plant holes at a rate of 30 grammes per plant hole (20 x 20 x 20 cm) mixed homogeneously with the soil. This equals an application rate of 3.750kg/m<sup>3</sup>.



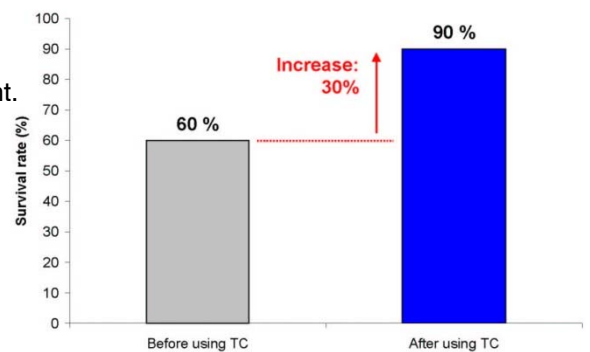
Photo 1 : Just after finishing planting up.  
An 8 cm layer of soil was added to prevent sand movement.  
Plastic was used to impede weed growth and also sand movement.



Photo 3 : 100 days later  
(*Buddleia* on the left and *Tamarix* on the right)  
In the previous planting schemes the plants were much smaller.

Photo 2 : 50 days later

Photo 4: 1 year later



### 3. Conclusion:

- Increased survival rate
- Increased biomass production
- Better growth
- Quicker establishment of plants