TerraCottem®, Leading soil conditioning technology

TERRACOTTEM

SUMMARY TRIAL REPORT

City of Pforzheim case study

Research by:

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Parks, hanging baskets, flower beds and other landscaped areas are the pride of many a city and its inhabitants. However, maintaining hanging baskets and flower displays to a high standard can be a challenging task for the city's horticultural staff.

The most frequent maintenance issues are related to the availability of water:

- Plant loss caused by drought stress
- Shortage of staff during the holidays
- Disruption of the traffic in the city centre due to watering
- Hard to reach places for the watering truck
- …

City of Pforzheim:

Winner of the
Gold Medal 2003

ENTENTE FLORALE DEUTSCHLAND
BUNDESWETTBEWERB „UNSERE STADT BLÜHT AUF"

Costs / benefits – analysis:

(1) Lay-out

- Growing medium (per m³)

50% White peat
50% Black peat + 1.25 kg Pg – Mix + 0.9 l Instant + 50g Radigen + 1.4 kg TerraCottem® Universal
15% Clay

- Plant species

Asteriscus, Cleomen, Begonia, Bacopa, Pelargonium, Verbenen, Lobelie, Helichrysum, Glechoma, Sanvitalia, Surfinia, Impatiens, Salvia, Fuchsia, Solanum, Lantanen, Scaevula, Bidens, Helianthus

- Planters

Eternit Type	# 300	
Garsy Pyramids 2.4m	# 6	
Garsy Pyramids 1.6m	# 6	
Garsy Arch	# 1	+ 3000m² flower beds
De Boer Type	# 56	
Flower Bowl (Ø 2.0m)	# 38	
Fischer Type	# 56	

(2) Inputs

➔ **Without TerraCottem®:**

Water is given 5 times a week.
Irrigation is done by 5 workers
Each worker gives water during 38.50 hours per week
} 38.50 x 5 = 192.50 hs. / week

➔ **With TerraCottem®:**

Water is given 3 times a week.
Irrigation is done by 5 workers
Each worker gives water during 27.75 hours per week
} 27.75 x 5 = 138.75 hs. / week

=> This results in a saving of irrigation time of 192.50 – 138.75 = 53.75 hours weekly. (*)

➔ Workers do the watering from mid-May till the end of September on average. However, in May and September, on average watering is only necessary once a week. Therefore, the effect of TC is most evident in the hot 3 month period: June, July and August i.e. 12 weeks per year.

=> This results in a total saving of irrigation time of 53.75 x 12 = 645 hours on a yearly base.
You could say 13 weeks or almost 700 hours.

(*) i.e. 28% less irrigation.

➔ Labour costs are approximately € 23.00 per hour.

=> In total, € 23.00 x 645 = € 14,835.00 is saved every year.

➔ Investment in TerraCottem®:
- 1.5 kilograms of TC per cubic metre of potting soil
- 40 cubic metre of potting soil is used
- TC – cost: € 7.00 / kg
} 60 kilograms of TC is used
} **Total cost**: **€ 420.00**

(3) Balance:

+	€ 420.00	TC – investment
-	€ 14,835.00	Savings in labour costs
-	€ 14,415.00	Total savings