

Team – 171



San Academy, Pallikaranai

PROBLEM CHOSEN

“ECO FRIENDLY SEED PLANTERS”



STUDENTS NAMES

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BACKGROUND

1. Children like nature and they want to do their best to protect it. Now, The students have a cool weapon to fight desertification of the city and to save the environment: seed bombs. Seed balls are made by wrapping seeds in mud. Once dry , they are tossed into any open space. When nourished by rains, the seeds may germinate and grow into a tree.
2. For years, plastic pots and module trays have been used by gardeners for [sowing seeds](#) and transplanting. Forefront, [biodegradable](#) alternatives are becoming more popular, with an increasing range of products on the market, including biodegradable fibre pots. One problem when sowing into traditional pots is the root growth of seedlings can be impacted if they are not transplanted early enough, with spiralling of the roots becoming a common issue. By contrast, the fibrous pots allow the roots of seedlings to push through the sides of the pot, which in turn promotes healthy and even root growth. Using these pots also works well for fussy plants that do not like to be transplanted, such as poppies, as you can plant the whole pot in the ground and allow the seedling to establish itself, while the pot breaks down naturally.

GOALS:

Here are three benefits to using biodegradable options for seed sowing rather than traditional plastic.

While biodegradable fibre pots are environmentally friendly, they are also quite expensive compared to plastic pots that can be washed and reused. However, you can make biodegradable pots using household items that you would ordinarily dispose of. The cardboard middles of [toilet rolls](#) have often been used as plastic free alternatives to sowing seeds. They can be cut in half for smaller pots. Alternatively, you can make paper pots out newspapers or old magazines with the help of a pot maker.

ACTIVITY 1 :

PREPARING NUTRIENT BALLS FOR SEEDS

The student prepared nutrient balls for germinating different seeds by using organic manure and millipedes. The students done Vegetative propagation using organic manure and plant twig. The students learnt how nutrient balls helps in germinating seeds and also different methods of plant reproduction.



ACTIVITY 2

PREPARATION OF VERMICOMPOST

The students prepared vermi composting inside the school campus using vegetable waste, earthworms, dry leaves, plant parts and cowdung. The students learnt how to prepare compost using different waste.



ACTIVITY 3

PLANTING THE SEED BALLS

The students planted nutrient balls which they prepared in activity 1 in pots to monitor the rate of growth of the seed saplings.





ACTIVITY 4

ECO-FRIENDLY POTS

The students prepared eco-friendly pots with biodegradable materials. The students used different materials such as paper mulch, bio-plastic and paper.

The students learnt these bio-plastic plant pots retain and share nutritional value and proteins which actually enrich the earth, soils and plants when left to decompose after use.



ACTIVITY 5

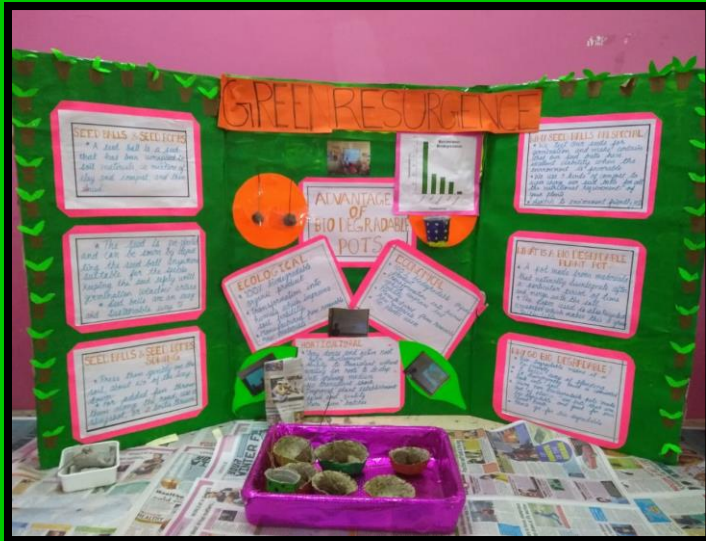
POWER POINT PRESENTATION

The students prepared powerpoint presentation on how to make seed balls and biodegradable pots and their importance. And also explained about uses of bio-degradable pots.



CONCLUSION:

The student displayed prototype model to know the importance of seed balls and biodegradable pots. The students also prepared Automatic Seed Sowing Robot for understanding how seeds can sow automatically and help the farmers.



_____Thank you_____