A

USER'S GUIDE ON

KANAK SMART COMPOSTING

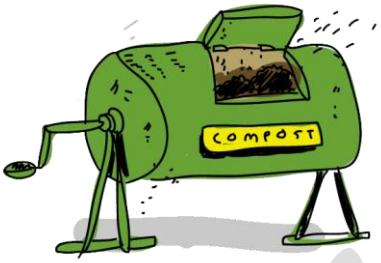
COMPOST & EARN!

INTRODUCTION:

We team KANAK, firstly congratulate you for buying our eco-friendly product and thereby extending your first step towards environment sustainability. Kudos!

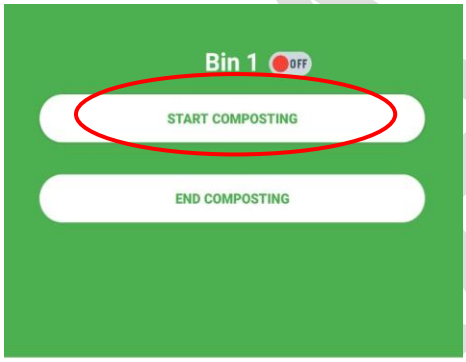
Kanak means gold in Sanskrit and we believe that value of our daily generated waste is nothing less than that. Extending this ideology we have brought forth this one of a kind compost monitoring reward based app which pays you for composting. Wealth from Waste, quite literally!

This user guide explains the working of this app and also has additional tips to help you all make great compost.



Step 1:
Add your daily kitchen waste to one of the two bins.

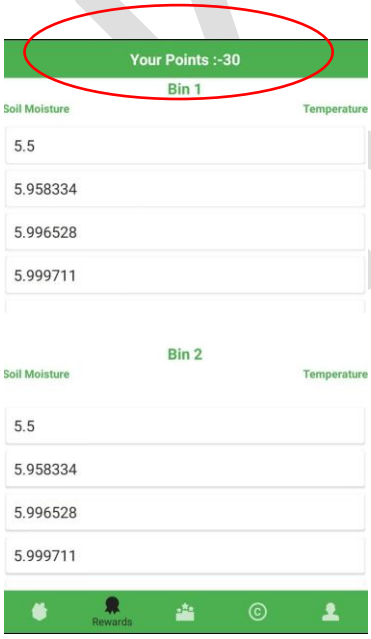
Keep doing this till bin is 3/4th full…not overflowing like me! don't forget to give your bin a spin daily!

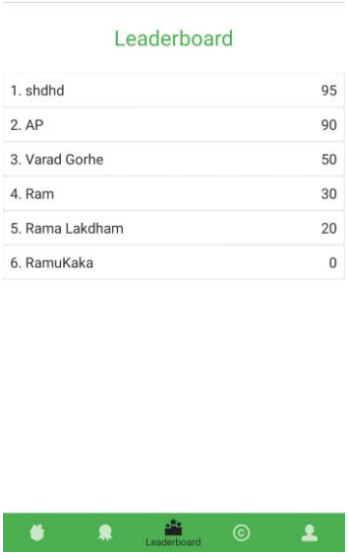


Step 2:
Press the start composting button.

Keep monitoring this kitchen waste everyday. Don't forget to rotate it. Daily rotation is the key! When you feel that your waste has become soil like and has no odor press Stop Composting on app for that bin

The inbuilt sensors will keep sending the soil moisture and temperature data to our database where we will analyze based on number of days it took and it' closeness to ideal values it and give you points





You can get to see your points after each cycle of composting and the latest five readings of temperature and soil moisture in the app. As per your points you can compare your position in the leader-board section of the app.

Earn as many points as you can by making a proper compost and achieve a higher position on the leader-board. Challenge your friends, family to beat you on the leaderboard!

Earn instant cash back after achieving of every 200 points. If you are amongst the first 3 rankers on the board you get additional points!

So now this was the process for composting. While compost gets ready in first bin use the second bin and follow the same procedure for second bin.

Now let's go through the guidelines of Composting process in general to help you with the process.

ORGANIC WASTE COMPOSTING GUIDELINES

- Composting method used is Aerobic composting. As the name suggests it requires sufficient aeration and hence the waste pile should be turned every day. To help you with this we have a rotating bin structure. Rotate the bins everyday atleast once in a day for 3-4 times.
- Material composts best when it is 1.25–3.75 cm in size. Soft, succulent tissues do not need chopping into very small pieces because they decompose rapidly. The harder or woodier the tissues, the smaller they need to be in order to decompose rapidly. Woody material should be passed through a grinder. Chopping material with a sharp shovel is effective.
- For the composting process to work most effectively, the material to be composted should have a C:N ratio of 30:1. Mixing equal volumes of green plant material with equal volumes of naturally dry plant material yields such a ratio. The green material can be grass clippings, old flowers, green prunings, weeds, fresh garbage and fruit and vegetable wastes. The dried material can be fallen leaves, dried grass, straw and woody materials from prunings.

Estimated Carbon-to-Nitrogen Ratios

Ashes, wood	25:1
Cardboard, shredded	350:1
Corn stalks	75:1
Fruit waste	35:1
Leaves	60:1
Newspaper, shredded	175:1
Peanut shells	35:1
Pine needles	80:1
Sawdust	325:1
Straw	75:1
Wood chips	400:1
Greens = High Nitrogen	**C:N**
Alfalfa	12:1
Clover	23:1
Coffee grounds	20:1
Food waste	20:1
Garden waste	30:1
Grass clippings	20:1
Hay	25:1
Manures	15:1
Seaweed	19:1
Vegetable scraps	25:1
Weeds	30:1

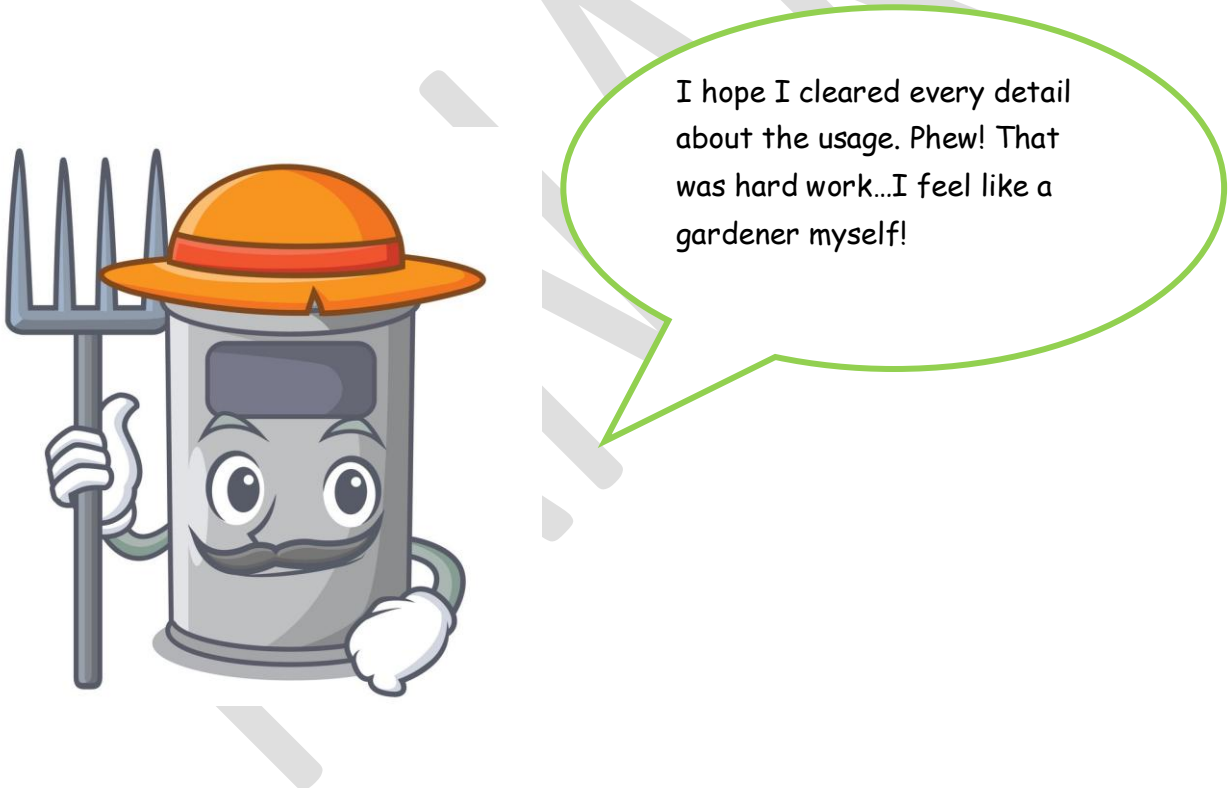
- Materials that should not be added to a composting pile include: soil, ashes from a stove or fireplace, bones, non vegetarian food waste, egg shells, etc.
- Once a pile has been started, nothing should be added. This is because it takes a certain length of time for the material to break down and anything added has to start at the beginning, thus lengthening the decomposition time for the whole pile. Excess material should be as dry as possible during storage until a new pile is started. Moist stored materials start to decompose. If this occurs, they will not be effective in the compost pile. Nothing needs to be added to the organic materials to make them decompose. The micro-organisms active in the decomposition process are ubiquitous where plant materials are found and develop rapidly in any compost pile.
- Composting works best where the moisture content of materials in the pile is about 50 percent. Too much moisture creates a soggy mass, and decomposition will then be slow and the pile will smell. Where the organic material is too dry, decomposition is either very slow or does not occur at all.
- The compost pile needs to be turned to prevent it from overheating. If the temperature in the pile rises much above 71 °C, the micro-organisms will be killed, the pile will cool, and the whole process will have to start again from

the beginning. Turning the pile prevents overheating and aerates the pile, both necessary conditions for keeping the most active decomposers functioning. The pile should be turned in a manner that the material is moved from the outside to the centre. In this way, all the material reaches optimal temperatures at various times.

- If the procedure is followed properly, a pile heats to a high temperature within 24–48 hours. If it does not do so, this means that the pile is too wet or too dry or that there is not enough green material (or N) present. If too wet, the material should be spread out to dry. If too dry, moisture should be added. If neither of these, then the N is low (a high C:N ratio), and this can be corrected by adding materials high in N (such as ammonium sulphate, grass clippings, fresh chicken manure or urine diluted 1 to 5).
- Where the C:N ratio is less than 30:1, the organic matter decomposes very rapidly but there is a loss of N. This is given off as ammonia, and where this odour is present in or around a composting pile, it means that valuable N is being lost in the air. This can be counteracted by adding sawdust to that part of the pile where there is an ammonia odour (sawdust is very high in C and low in N). Some covering for the pile may be necessary in order to keep the composting materials from becoming too wet during the rainy season.
- The rapid decomposition can be detected by a pleasant odour, by the heat produced (visible in the form of water

vapour given off during the turning of the pile), by the growth of white fungi on the decomposing organic material, by a reduction of volume, and by the materials changing colour to dark brown.

- The compost is then ready to use. If the material was not chopped into small pieces during the preparation phase, screening the material through 2.5-cm-mesh chicken wire will hold back the large pieces. These can be added to the next pile and eventually they will decompose.



We hope the guide helped you. However if we missed out on anything do let us know on the contact details mentioned below.

If you liked the product don't forget to refer us to your family or friends.

No product is perfect and there is always a scope for improvement. For suggestions or problems faced from your side don't hesitate to contact our support.

CONTACT DETAILS:
xyz@email.com
Number:1234567890

Dusty wishes you all a
HAPPY COMPOSTING!