

堆肥 Composting

堆肥的形成是一個自然的生物降解過程，其中可被生物降解的物質經微生物分解，然後產生一種類似腐殖質的物質。製造堆肥可將動植物廢料循環再用，是一個環保的好方法，不僅能令這些可生物降解的物料無須成為堆填區的垃圾，更可將之變成有用的肥料，為耕地提供寶貴的養份和有機質，從而種出較能抵禦病蟲害的健康作物。

Composting is a natural biological process where micro-organisms break down biodegradable materials to produce a humus-like substance. The end product of this process is called compost. Composting is an environmentally sound method of recycling plant and animal wastes. Not only can it divert these biodegradable wastes from the landfills but also turn them into useful material which can provide valuable nutrients and organic matter to the soil, which in turn produces healthy plants that are better able to resist disease and insect pests.



製造堆肥

有機農夫收集禽畜糞便、棄置的菜葉、粟米稈、雜草、樹葉、木灰、木片、農場本身或附近農場生產的其他植物材料等等，然後在空曠地方堆在一起，或放入桶內。肥料堆須經常翻動，確保有足夠氧氣進入，以助加速分解過程。同時，堆肥須保持適當的濕度，但不宜過濕，因過濕會阻碍空氣的流通，不利分解。當微生物開始活動時，肥料堆便會發熱，物質開始加速分解。分解過程的快慢視乎多項因素，例如氧氣、溫度、濕度、肥料堆的大小和所用的物料等等。

Making compost

Organic farmers collect wastes such as livestock manures, vegetable scraps, corn stalks, weeds, leaves, wood ashes, wood chips or any other plant materials produced on the farm or from nearby farms and pile them up in an open area or in a bin. The pile is then turned regularly to ensure that there is a supply of adequate oxygen to speed up the composting process. It is also very important to make sure that the pile is just getting adequate moisture but not getting too wet as it is necessary to have aeration for speedy decomposition. As soon as the microorganisms begin to work, the pile will start to heat up and the decomposition process begins to take place. The effectiveness of the process is dependent upon various factors such as oxygen, temperature, moisture, the size and combination of the feedstock materials.

製成的堆肥

優質的堆肥是深色、易碎、似泥土一般的物質，無難聞氣味，帶有土壤的芳香氣息。由於在堆肥過程中肥料堆的溫度會上升至攝氏65度左右，因此製成品中應不存在有害的病原體、雜草種子和寄生蟲，將之直接施加於耕地上亦甚安全。經過堆沤的過程，原來可溶於水的養份大部分會以較為穩定的有機形態存在於堆肥中，不易流失，這可減低使用堆肥可能造成的環境污染。

Finished compost

Well-made compost is a dark, crumbly, soil-like substance. It does not have any undesirable odour but with some kind of an earthy aroma. With the temperature of a compost pile reaching up to as high as 65°C, compost should be free of harmful pathogens, weed seeds and parasites and it is considered a relatively safe product for use directly on the soil. Most of the soluble nutrients which may be found in the raw materials used to make compost, will have been converted to more stable, organic forms. This reduces the likelihood of environmental pollution from the use of compost.



使用堆肥的好處

Benefits of using compost

- 增加土壤中有益的微生物量
Increases beneficial soil micro-organisms
- 提供植物吸收的養份
Provides slow release of nutrients for plants
- 改善土壤結構與保水能力
Improves the structure and water holding capacity of soil

