

Project Coordinator

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COMPOSTING GUIDE



Composting: Useful Facts

How to Make Compost

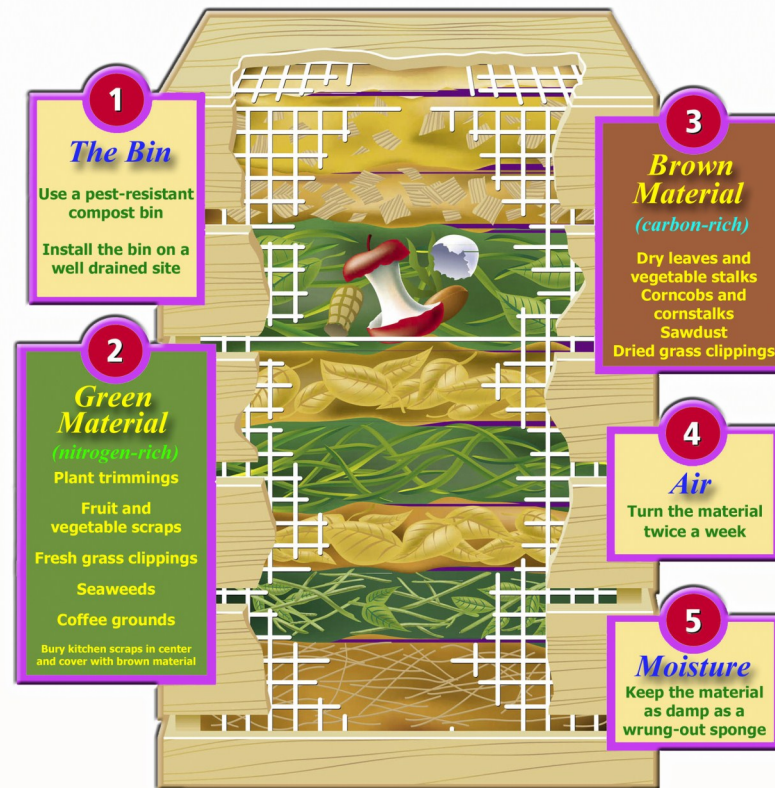
Organic matters such as banana pseudostem, leaves, fruit peels; taro petioles, excess leaves, corm peels; sweet



potato and kangkong petioles and vines, excess leaves; and swine manure can be used for composting. Solid swine manure is separated from the piggery effluent by using a rundown screen and sun dried for two weeks. Dried solid manure is shredded along with the dried organic materials



such as crop residues, and then used as brown material for composting. All fresh and green organic materials are shredded while still fresh and then used as green material for composting. Effluent from the piggery can be collected in cement tanks after solid removal through rundown screen. Five percent of shredded green crop residues by volume are then added and mixed thoroughly in the collected effluent. The mixture is allowed to decompose through aerobic microbial activity for initial 2-3 days and later on should be left for anaerobic fermenta-



tion for 7-8 days. The treated effluent can be diluted and released directly into the plots for wetland crops and can be also used to maintain moisture content in the compost pile. Hot composting technique is implemented to convert the nutrient-rich crop residues and swine manure into valuable compost. A six inch layer at the bottom of the compost pile is filled with coconut husk for better air circulation. Green (nitrogen rich) and brown (carbon rich) materials are layered alternately and on each layer a half inch thick layer of finished compost, and fresh and healthy

soil from the forest is added as an activator. Aerobic process is used for decomposition of organic matters. High microbial activities generate heat that is regulated and maintained within the required



range of 140-158°F in the composting pile by appropriate air circulation and proper moisture maintenance during heating phase. The pile is turned once in a week and treated effluent from the piggery is sprayed to control and maintain appropriate temperature and moisture, respectively. The heating phase gradually changes into a cooling phase and decomposition occurs without much generation of heat, and temperature drops slowly up to 86°F. At the end of decomposition, during the maturation phase, the temperature drops between 68-77°F and results in finished compost. This ecologically integrated and well managed system can compost the manure, spilled feed and crop residues in less than 3 months.

