



Necessity of physical, chemical and biological standards and regulation observing for compost and vermi-compost production

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According to the conducted studies and investigations, currently, in many countries of the world, compost is produced with respect to practical conditions, environmental & sanitation observance, economical aspects, quantity & quality of garbage, by different industrial & non-industrial methods. Therefore, during the recent years, compost production industry has expanded considerably. In the most cities of Iran, organic waste materials, which are changeable into the compost, consist about 70% or even in some cities 80% of municipal wastes. Producing fertilizers from municipal wastes, beside controlling and recycling of waste materials can be a good source of revenue capable of meeting the collection and disposal costs. There are different physical, chemical and biological standards for compost production from solid waste materials in production & consumption stages, for example WHO, EPA, Swiss, Austria, Germany, France, Denmark standards,... but unfortunately in Iran no definite standards have been settled so far. In order to determine physical specifications of compost, the particles size, fermentation progress, percentage of useless materials such as plastics, glass, paper,... should be considered according to the usage method. In order to determine chemical specifications of compost, nutritive value, mineral matter specially heavy metals and toxic organic compounds should be regarded & in biological specifications the pathogenic factors such as bacteria, virus & parasite ova should be taken into account. In our country, compost is among important priorities of municipal solid waste management; developing compost industry from mixed waste material, in case of ignoring hygienic, environmental & economical aspects, will threaten the environmental and society health. Lack of rules and standards on one side and lack of references tests and incapability of conducting necessary tests for this subject on the other side, are among the cases, which should be considered. Therefore, awareness of physical, chemical & biological standards of compost is necessary for agents and officials responsible for waste materials management in our country.

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