



Evaluation of recycling potential of solid wastes produced in Saveh

A. Gafare¹ and M. Shirmard²

1. Municipality of Saveh

2. Ph.D Student of Botanic

Saveh with an area of 8743 Km² is the second big city in Markazi province and with a population of over 185000 produces up to 50000 ton of solid wastes in a year. Thus management of such a quantity of wastes needs a comprehensive and precise planning. In this research by chemical and physical analysis of these wastes, their components, compostable materials and parameters such as pH, saturating percentage, organic carbon, available nitrogen content and humidity were determined. For this purpose sampling was carried out at different seasons and from the collected wastes of every truck carrying at least 400 families wastes. The per-capita of waste production was calculated in Saveh for the years 1383 and 84. According to physical analysis around 73.3% of wastes were organic, recyclable materials which are produced up to 254.4 ton yearly. The rest of recyclable dry wastes included paper, glass, metal, plastic and pet in an amount of 4.5, 1.5, 1.3, 0.6 and 0.4 respectively. The results suggest that every person produced 0.5 Kg of wastes daily which up to one third of that is recyclable that means around 35 thousands Kg of wastes daily. By applying the produced compost the use of chemical fertilizers would decrease up to 70%.

Keywords: waste management, solid wastes, compost, bio-compost, separation from origin