



Use of *Morus alba* leaves for enhancement of plantanus leavs composting rate and its quality improvment

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Plane tree(*Plantanus Spp*) is one of the annually deciduous trees that the copmposting procedure of its leaves takes long time. The objective of this experiment was to study the effect of mulberry(*Morus alba*) leaves on quality and the composting rate of plane tree leaves. Green house studies were conducted using a completely randomized design block with a factorial arrangement of 0, 25, 50, 75 percent of mulberry(*Morus alba*) leaves on volume bases with 3 replications. The control was 100% pure plane tree leaves. This experiment continued for 6 month, and the plots were monthly sampled for measuring C/N, C/P, pH, Ec, particle density, balk density, color and decomposition degree as some of important evaluting factors of composting. The results showed that the changes of C/N ratio in plane tree leaves were very low(ranged from 21 to 23); however the different volume percents of mulberry leaves had significantly decreased C/N ratio and C/P ratio too ($P<0.01$). The value of pH Ec and particle density increased during composting but balk density decreased. 50% and 75% mulberry leaves treatments were darkest among others. Color of these treatments were black(10YR.2/1) at the end of second month; however the color of the plane tree leaves was yellowish red(5YR4/6) during humification. . All kinds of additives had significantly increased Ec ($P<0.01$) at the end of experiment. Decomposition degree increased during the composting, 50% and 75% mulberry leaves treatments had the greatest decomposition degree.

Keywords: Compost, Plane tree, Plant residual, Ec, C/N, C/P, pH

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