

## **Effects of corn stem as a soil conditioner toward a green approach on waste management**

### **ABSTRACT**

This study examined the period of time that is needed for corn stem to degrade into soil in order to provide a suitable pH condition for the next planting. Experiments were conducted in an open area to enable the treatment to blend with the natural environment similar to the actual practice. The corn residue which comprised corn stems and leaves were ground and mixed with soil in different concentrations (0, 20, 60, 80 and 100 g kg<sup>-1</sup>). The moisture content and pH readings were measured for 60 days at 10 day intervals. Results showed that 20 g kg<sup>-1</sup> was the most suitable concentration for a soil conditioner as it can constantly increase its pH value of  $R^2=0.9457$  and F value of 234.36 and maintain soil moisture content,  $R^2=0.4217$  and F value of 164.82.