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Abstract	:	<p>The potential of oil palm frond biochar to ameliorate acid sulphate soil was evaluated. In Malaysia, acid sulphate soil can be found mainly in coastal regions where waterlogged soil was drained for agriculture purposes. The soil has a very low pH value and high dissolved aluminium concentration which are both detrimental for plant growth. In this study, biochar was produced from sundried, 3 × 3 cm oil palm frond by allothermal pyrolysis at 345 °C for 45 min. Acid sulphate soil was obtained from Kampung Sungai Raya (Negeri Sembilan), characterized and incubated with three oil palm frond biochar application rates (20, 40 and 60 g/kg). The changes on acid sulphate soil pH and electrical conductivity (EC) value were monitored for 40 days. Oil palm frond biochar application rate had a significant effect ($p < 0.05$) on acid sulphate soil pH and EC. While incubation period had no significant effect ($p > 0.05$) on EC, the pH at oil palm frond biochar application rates of 40 and 60 g/kg was significantly greater than the control and 20 g/kg ($p < 0.05$). Our study clearly demonstrates that acid sulphate soil from Kampung Sungai Raya can benefit from the addition of low-temperature oil palm frond biochar at moderate dosage rates of 20–60 kg per kg soil.</p>