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(57) Abstract :
Disclosed is a method (100) of developing Pseudomonas stutzeri immobilized rice husk biochar to alleviate cadmium stress in Spinacia oleracea L. includes incubating (102) cadmium-contaminated soil samples with Pseudomonas stutzeri immobilized rice husk biochar for a predetermined period of time, planting (104) Spinacia oleracea L. seeds in germination trays with the soil samples and incubating them for a predetermined period of time, recording (106) the germination parameters, selecting (108) a sub-sample of plants for extended monitoring of plant growth, cadmium accumulation, and soil property change, replanting (110) the sub-sample of plants in pots containing a predetermined amount of cadmium-contaminated soil amended with Pseudomonas stutzeri immobilized rice husk biochar, monitoring (112) the plant growth for a predetermined period of time, recording (114) the biomass and cadmium content in the plants, and determining (116) the soil enzyme activities and organic matter content of the soil samples. Figure 1.

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