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Physicochemical and morphological features of *Talinum triangulare* (water-leaf) exposed to hydrocarbon polluted soil

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Abstract

Investigations were made on the effect of Bonny light crude oil on stem sprouting of *Talinum triangulare*. Five concentrations of crude oil viz, 2.5mls, 5.0ml, 7.5ml, 10.0mls and 12ml were applied to 7kg of dry soil in perforated polyethene bags. The experiment was carried out on a completely randomized design (CRD) and replicated 6 times. Data on the number of days to sprouting, number of branches, number of leaves, leaf area and plant height were collected. It was observed that the different concentrations of crude oil significantly ($p<0.05$) affected the number of leaves. Although there was no significant difference ($p> 0.05$) for number of days to sprouting, plant height and number of branches between the plants in the treated soil and control group, there were physical effect of stunted growth and death of plants. The concentrations of crude oil, however significantly affected soil properties like Ca, Mg, ECEC, soil pH, available phosphorus and Total hydrocarbon content.

Biography

Agbor Reagan Bessong is currently doing his Ph.D in Environmental Biotechnology, University of Calabar. Currently, he is Lecturer in the Department of Genetics & Biotechnology, University of Calabar, Nigeria. He has published 26 papers in reputable Journals.