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Sodium Azide: A Chemical Mutagen for Enhancement of Yield Traits of Sesame

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Importance of nutritious food in the life of human cannot be over emphasized, as it is a predictor that fosters security in any community which Nigeria is part of. Sesame has shown a cholesterol-lowering effect in human because of its high mineral content. The focus of this work is on Sodium azide : a chemical mutagen for enhancement of yield traits of sesame. The mutant plants produced by the treatment of sodium azide have improved yields, in comparison to normal plants. This investigation was carried out to study the effect of Sodium Azide (SA) on two varieties of Sesame (Sesamumindicum) viz; Kenana-4 and Ex-Sudan. Three hundred seeds of each variety were treated with Sodium azide at five different concentrations, 0.00%, 0.02%, 0.04%, 0.06%, 0.08%. The chemically treated and the control seeds were grown to maturity. The parameters investigated include number of flowers per plant, number of capsules per plant, length of capsule, weight per capsule, number of seeds per capsule, percentage flowering and oil content. Thus Sodium azide have potential of creating genetic variability in sesame, certain concentrations of Sodium azide (0.2% through 0.4% sodium azide concentration) have the potentiality of inducing variability that could be used in the improvement of sesame. Therefore more work should be done on M2 and M3 of these mutant varieties. In addition communities should be encouraged through advocacy activities to make sesame part of their regular menu, considering its nutritional value.

Biography

Kinta Mohammed completed his Phd (Health Education) from University of Ilorin, Ilorin Nigeria. He is a lecturer, also is the chairman Research and Publication unit of Federal College of Education, Kontagora Niger State, Nigeria. He has published more 19 papers in reputable journals and has been the Chairman of editorial board of Federal College of Education journal (NJRE).

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