

A B S T R A C T

The control of Fimbristylis miliacea is considered in relation to the rice crop and the possible part that herbicides can play is pointed out. Previous attempts at the chemical control of rice weeds are reviewed, and the properties of the herbicides used are discussed. Some account is also given of modern herbicidal techniques in relation to the methods used in this investigation.

Three experiments were undertaken involving post-emergence treatments with 2,4-D (amine salt and ester), P.C.P. and T.C.A.; pre-emergence treatments with P.C.P., T.C.A., C.M.U., S.E.S. and C.I.P.C. and one water treatment using 2,4-D amine salt. The results show that Fimbristylis miliacea can most successfully be controlled by a post-emergence application of 1 lb. 2,4-D per acre or a pre-emergence application of 1 lb. C.M.U. per acre.

The use of probit analysis is discussed and the relative toxicities of the chemicals were assessed from probit diagrams. A full analysis of the data is given for the post-emergence treatment of 2,4-D (amine salt).

The possible application of the results under Trinidad conditions is discussed, and recommendations are made for future lines of research.