ABSTRACT

Various herbicides are considered with respect to their control of *Fimbristyliis miliacea* and *Sphenoclea zeylanica* and also a tentative examination of their effects upon the yield of rice.

Chemical control of rice weeds in other parts of the world is briefly discussed.

Two investigations were undertaken, post emergent applications to *Fimbristyliis miliacea* and *S. zeylanica* with the sodium salt of 2,4-D, C.I.P.C., Amizol, the ammonium salt of D.N.B.P. and a mixture of D.N.B.P. and 2,4-D.

Each herbicide application is regarded as a complete and separate experiment.

The results show that *S. zeylanica* was controlled by D.N.B.P. in the experiments by rates of application as low as 0.75 lbs./acre and by the mixture at a combined rate of 0.75 lbs./acre D.N.B.P. and 0.6 lbs./acre 2,4-D.

*Fimbristyliis miliacea* was controlled at rates of ½ lb. and over of 2,4-D and 1.5 lbs. D.N.B.P. + 1.2 lbs. 2,4-D in the mixture.

The conclusion for these experiments is that 1.2 lbs. of sodium salt of 2,4-D + 1.5 lbs. of ammonium salt of D.N.B.P. will give good control of both weeds.

The yields of rice seemed to increase from the limited results taken and it appears that the equivalent of 1.5 lbs. of ammonium salt of D.N.B.P. per acre applied gave the largest increase in yield.

Full tables of plant numbers and statistical analysis is given for each treatment (analysis of C.I.P.C. on *F. miliacea* excepted).

The possible applications of results and recommendations of further work under Trinidad conditions are given.