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EFFICIENCY OF POTASSIUM SCHOENITE AS A SOURCE  
OF POTASSIUM TO RICE.

This experiment has been designed to study the relative efficiency of potassium schoenite a by-product of salt industry containing 22%  $K_2O$  and 10.9%  $MgO$  as a source of potassium as compared to imported potassium sulphate and potassium chloride to rice. The experiment has been started during *Kharif* 1973-'74 and continued for three years till *rabi* 1975-'76. The treatments are applied during the *Kharif* season and the residual effects are studied during the *rabi* season. The experiment was laid out in a randomised block design replicated four times. Nitrogen and phosphorus were applied at the rate of 120 and 60 kg respectively during both the seasons. Potassium at the rate of 40, 80 and 120 kg/ha was applied only during the first season and its residual effect studied during the second season. Phosphorus and potash were applied as basal dose and nitrogen in two equal split doses, the first as basal

Table 1 Grain yield as influenced by different source of potash (pooled results)

| Treatment                                       | Grain yield kg/ha       |                         |
|---|-------------------------|-------------------------|
|   | Direct effect<br>Kharif | Residual effect<br>Rabi |
| Control. (Unmanured)                            | 3722                    | 2965                    |
| N 120 -f $P_2O_5$ 60 kg/ha                      | 4514                    | 4107                    |
| Tr.2 + Pot. Schoenite at the rate of 40 kg/ha   | 4212                    | 3667                    |
| Tr.2 4 Pot. Schoenite at the rate of 80 kg/ha   | 4413                    | 3906                    |
| Tr. 2 + Pot. Schoenite at the rate of 120 kg/ha | 4552                    | 3916                    |
| Tr.2 + Pot. Sulphate at the rate of 40 kg/ha    | 3913                    | 3916                    |
| Tr. 2 + Pot. Sulphate at the rate of 80 kg/ha   | 4014                    | 3788                    |
| Tr.2 + Pot. Sulphate at the rate of 120 kg/ha   | 4538                    | 3705                    |
| Tr.2 + Pot. Chloride at the rate of 40 kg/ha    | 4305                    | 3906                    |
| Tr.2 4 Pot. Chloride at the rate of 120 kg/ha   | 4503                    | 3910                    |
| C. D. (0.05)                                    | 588                     | 372                     |

and the other at boot leaf stage. The results of the experiment indicates no positive response to the applied potash. This may be due to high amount of available potash in the soil, (Annual report, AICARP, K. A. U. 1975--76). Besides, the sources of potash, namely, potassium sulphate, potassium chloride and potassium schoenite also have no difference in their effect on the yield of rice (Table I). This indicates that potassium schoenite—an indigenous source of potash can be used for rice instead of imported potassic fertilizers to satisfy potassium requirement of the crop.

### സംഗ്രഹം

ഉപ്പു വ്യവസായത്തിലെ ഉപോൽപ്പന്നമായ പൊട്ടാസ്യം ഷീനൈറ്റ് എന്ന ക്ഷാരം ശമടങ്ങിയ പദാർത്ഥം പൊട്ടാസ്യം സൽഫേറ്റിനേയോ പൊട്ടാസ്യം ക്ലോറൈഡിനേയോ പോലെതന്നെ നെൽ ചെടിക്കു് ഉപയോഗപ്രദമാണെന്നു് കണ്ടിരിക്കുന്നു. വില താരതമ്യേന കുറഞ്ഞ ഈ പദാർത്ഥം മാറ്റു ക്ഷാരപ്രധാനമായ വളങ്ങൾക്കു് പകരം നെൽകൃഷിക്കു് ഫലപ്രദമായി ഉപയോഗിക്കാവുന്നതാണു്.

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