

Lecture Meeting on ‘Reclamation on Sodic Land in UP’

A technical talk was delivered at UP State Centre on 16/09/2018 on the subject ‘Reclamation on Sodic Land in UP’ by Er S A Khan, Retd. Executive Engineer, UP Irrigation Department. Er Khan explained in detail about the Sodicity of land and how it can be managed to grow crops and construct irrigation facilities in such areas. Sodic soil are such, which have more than 15% exchangeable sodium, which has an adverse effect on physical and nutritional properties of soil with consequent reduction in crop growth significantly or entirely.



The speaker delivering the talk

Sodic soil symptoms: Plant growing in sodic soil may show drought symptoms like those growing in saline soil but sodic condition also reduce the visibility of seedlings and can negatively affect germination. Sodic soil may also develop a brownish black crust that is caused by the dispersion of organic matter.

While visible symptoms are helpful in diagnosing saline or sodic soil, a soil test is needed to accurately diagnose and treat the problem.

Sample is collected from 6 to 12 inches of soil and tested in soil testing laboratories.

Er Khan also told the gathering about the management of such soil by periodically increasing the water given to plants, which may leach the salt from soil provided soil has good drainage.

Another option is to plant salt tolerant plants that have deep roots to help draw salt from the soil to manage sodic soil, we must replace the sodium with calcium before leaching the sodium from the soil. This can be accomplished by dissolving calcium carbonate (Lime stone) or Calcium sulfate (Gypsum) in the soil with the application of sulfate or sulfuric acid. If soil test indicates that calcium carbonate or calcium sulfate is not present, adding calcium in form of calcium chloride and Gypsum may reduce sodicity. The exact amount of sulfur, Gypsum or Calcium Chloride to be added depends upon the level of sodicity indicated by the soil test.

Earlier Dr Bharat Raj Singh, Chairman of UP State Centre welcomed the Speaker and Guests and also told about the importance of removing sodium and salinity from the soil, from plants growth point of view. In the end Er R K Trivedi, Hon. Secretary thanked to all present in the event.