

## ABSTRACT

Direct heating method was used to prepare iron-urea complex and iron-thiourea complex.  $\text{FeSO}_4$ , urea and thiourea were used as precursor, ethylacetate, DMF, THF, ethanol and water were used as solvents. Different samples of both the complexes were prepared. Both the compounds were soluble in ethyl acetate and water. Iron-urea complex was applied to sorghum seeds and noted their effect for the growth and the control of chlorosis. The comparison of iron-urea complex and the other compounds of different ratio of iron and urea, was also made for sorghum seed. Field test for iron-urea complex was done. Iron-urea complex was applied to the lawn grass and noted its effect for chlorosis. Iron-urea complex reduced the chlorosis and increased the yield of the sorghum plants and the lawn grass.