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Availability of soil phosphorus amended with Bone Meal and its effect on corn plant

N. Ghorbanzadeh[1] , G. H Haghnia[2] , A. Lakzian[3] and A. Fotovat[4]
1. M.Sc. Student of Ferdowsi University of Mashhad
2. Prof. of Ferdowsi University of Mashhad
3. Associated Prof. of Ferdowsi University of Mashhad
4. Assistant Prof. of Ferdowsi University of Mashhad

Bone meal contains large amount of phosphorus that could be used by plants as a substitute to chemical fertilizers. The main objective of this study was to determine the capability of bone meal for releasing phosphorus and its effect on growing corn. An experiment was conducted in a completely randomized design under laboratory and greenhouse conditions with 6 treatments that included 2 levels of bone meal and 2 levels of acidic bone meal, triple super phosphate and control with 3 replications. The results demonstrated that in treatments with bone meal, phosphorus release had 30 days lag compared to triple super phosphate. Acidification of bone meal caused a faster and more release of phosphorus. The experiment also showed that acidified bone meal did not change the concentration of phosphorus in the shoot. However, shoot dry matter weight was significantly higher in acidified vs non acidified bone. But, compared to chemical fertilizer, their differences were not statistically significant($P>0.05$).

Keyword: Bone meal, phosphorus, Releasing, Corn.

[1] Corresponding author Email: nasrin_gh908@yahoo.com