

ESTIMATION AND IMPACT OF FLUORIDE CONTENT CAUSING SOIL POLLUTION IN SURROUNDINGS OF NOIDA

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Received-23.02.2016, Revised-30.06.2016

Abstract: In this communication the author has carried out the estimation and impact of fluoride Content which is causing Soil pollution. Eight locations including Dadri, Kasana, Dankaur, Chiti and others have been taken for the study. The pH and organic content of the Soil in the region, ranges from 4.9-5.9 and 2.4 to 9.2% respectively. The concentration of fluoride ion ranges from 78.7 ± 2.5 to 202.2 ± 1.2 in (mg/Kg dry wt). It is observed that as soils become more acidic, fluoride ion can be released in to solution and form complexes with aluminium. As soils become more alkaline negative charge increases on Soil surfaces, desorbs fluoride ions and could increase the fluoride ion concentration in solution. The impact on health may be serious, causing there by decolouration of teath, severe pain and stiffness in bones.

Keywords: Fluoride, Soil, Noida, Pollution

REFERENCES

- Antil, Singh, R.S., Anoop and Dahiya. S.S.** (2002). Practical manuals for soil and plant analysis Simplex Offset Printers.
- Bear, F.E.** (1964). Chemistry of the soil (2nd Ed.), Oxford and IBH publishing Co. Pvt. Ltd. New Delhi. p. 366.
- Hanna, W.J.** (1964). Soil Chemistry and Plant Nutrition, in : Bear F.E. (Ed.), Chemistry of soil, Oxford and IBH publishing Co. Pvt. Ltd., New Delhi, p. 474.
- Mcquaker, R. Mary.** Determination of total fluoride in soil and vegetation and Gurney, using an alkai fusion-selective ion electrode technique. Analytical Chemistry, (1977) Vol. 49, No. 1., 53-56.
- Meryer bernand, S. Anderson and Donald B.** (1952). Plant Physiology (2nd Ed.) D. VanNostrand company, Inc., p. 489.
- Gaikwad, R.H., Patra, A.K., Ravi, P.M. and Sharma, R.M.** (2004). Journal IAEM, Vol. 31, 220-224.
- Santhi, D. Bhagan, U.V. Sarma, R.L.** (2002). Concentration of fluoride ion in surface soils and under-ground water samples in Valioor union of Tirunelveli district, Tamilnadu, India Poll, Res., 21 (2) : 2003-2007.

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