



جامعة الفيوم
كلية الزراعة
قسم الاراضي والمياه

ملخصات الابحاث المقدمة من الدكتور/ عبد الناصر أمين أحمد عبد الحفيظ
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البحث الثامن

Abdurrahman H. A., Abdel-Hafeez A.A.A., Kamel G. A. and Ahmed H. S., 2020.

Assessment and spatial distribution of cadmium, nickel and lead within soils of Sinnours, Fayoum, Egypt. Egypt. J. Soil. Sci. Vol. 60, No. 3, pp. 247- 261.

التوزيع الجغرافي وتقدير الكاديوم والنيكل والرصاص في أراضي مركز سنورس محافظة الفيوم- مصر

الملخص باللغة الانجليزية

THIS RESEARCH hundred twelve soil samples were taken from fifty six locations to represent Sinnours lands study addresses a problem of soil pollution caused by heavy metals. One using the grid system at two kms distance to assess and distribute of cadmium (Cd), nickel (Ni) and lead (Pb) in soils of Sinnours district, Fayoum Governorate, Egypt The geographic information system techniques were applied to map the spatial distribution of three heavy metals. The results obtained showed that the overall mean of each of Cd and Pb concentrations were higher within the surface (0 – 30 cm) of soils than the subsurface (30 – 60 cm) layer, indicating that Cd and Pb pollution of soil surface. In general, the concentrations of nickel (Ni) have been higher in the lower than the top soil layer indicating Ni normal soil contamination. The maps generated through Geographical Information systems (GIS) are beneficial for decision makers for land use planning, conservation and evaluating the level of environmental pollution with hazardous metals. The authors emphasize the actual absence of Egypt to develop detailed standards for the assessment of soil pollution with heavy metals primarily based on the nature and properties of the Egyptian soils.