

(Children)

NO	: 170
TITLE	: Effect of Vitamin K Administration on Coagulation Profile in Infantile Diarrhea .
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BULLETIN	: Assiut Med. J. Vol. 23, No., 1, 1999 .

ABSTRACT

The study included 96 infants with diarrhea in addition to 15 healthy infants of matchable age and sex as control group. Full clinical assessment was done with particular emphasis on age, duration of diarrhea, type of feeding, antibiotics therapy, nutritional status, history of recurrence and hydration state. Single intramuscular injection of 1 mg of vitamin K₁ was given to every other patient randomly. Prothrombin time, factors II, VII, IX and X activities were estimated initially and after 3 days. Infants with either acute or chronic diarrhea showed significantly prolonged prothrombin time and significantly decreased vitamin K dependent coagulation factors activities (II, VII, IX and X) than controls. Breast feeding, antibiotic therapy, malnutrition and history of recurrence are the major risk factors that accompanied by significant prolonged prothrombin time and significant decreased activity of II, VII, IX and X coagulation factors. The higher the risk factors, the more prolongation of prothrombin time and lowering the clotting factors activities. Infants who received vitamin K₁ supplementation showed significant improvement of prothrombin time and clotting factors activities (II, VII, IX and X) than those who did not receive it .

In Conclusion: Subclinical Vitamin K dependent coagulation factors deficiency is commonly accompanied infantile diarrhea particularly chronic cases, exclusively breastfed malnourished and recurrent cases as well as those receiving antibiotic therapy. Single intramuscular injection of vitamin k₁ can correct these hemostatic defects .

(Plants)

NO	: 171
TITLE	: Biological and Chemical Control of Covered Kernel Smut of Sorghum (<i>Sorghum bicolor</i> (Linn.) Moench.) .
AUTHORS	: Botros, S.E., F.A. Saeed*, M.S. Mohamed* and Aida, M.El-Zawahry* .
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BULLETIN	: Assiut Journal of Agricultural Sciences Vol. 25. 1., 1994 .

ABSTRACT

The antagonistic organisms *Trichoderma Harzianum* and *Bacillus subtilis* were used for biological control of covered kernel smut disease. They inhibited growth of *Sphacelotheca sorghi* in vitro and reduced percentage of infection by the disease in the field.

T. Harzianum was superior in controlling the disease than *B. subtilis*. Dressing sorghum grains with the fungicides, Homai 80 and Benlate increased grain germination, while Rovoral and Sumislex showed no effect. Bayleton and Rizolex decreased grain germination. Rizolex completely prevent grain germination of long sorghum cultivars (Giza 15, Local 129 and 29). Topsin M 70, Vitavax captan, Vitavax thiram, Benlate, Homai 80, Rovoral and Baylton fungicides completely con-trolled covered kernel smut disease when used as grain dressers at the rate of 3 g/kg under artificial inoculation by teliospores in the field .

(Water)

NO	: 172
TITLE	: Removal of Suspended Solids and Algae in Rectangular Setting Tanks .
AUTHORS	: M. H. Abd El-Megeed.
ADDRESS	: Dept. of Civil, Faculty of Engineering, Assiut University.
BULLETIN	: Thesis, 1985.

ABSTRACT

Sedimentation tanks are used extensively for the removal of suspended solids from water, and for the removal of organic and inorganic matter from wastewater.

The purpose of this research is to determine the effect of electrical treatment on the removal efficiency of both suspended solids, and algae from turbid water in rectangular setting model . The model which is used in our experimental work is rectangular and made from steel sheets and glass, of 200 cm length, 50 cm breadth, and 30 cm depth of water.

The electric field was formed using rectangular galvanised steel plates, or cylindrical bar electrodes, placed in the inlet of the rectangular settling model. Studies were made to find effects of : the distance between electrodes, the intensity of electric volt and surface area of electrodes submerged in the water at the inlet of the tank, on removal efficiency.

Many mathematical formula connecting the main parameters with the removal efficiency of suspended solids in the model are also deduced .

