

Composition of Palestine waters according to the natural conditions of the land

by Dr. F. Menchikovsky.

1) The composition of water in the springs and rivers of Palestine is influenced by the minerals of the soil and the conditions of surface and climate.

2) Palestine may be divided, from the hydro-metereological point of view, into two belts: the western belt with an abundant rainfall and low evaporation, and the central belt—the Jordan Valley—with a low amount of precipitations and a high degree of evaporation.

3) In the western and eastern parts of Palestine the leaching phenomena differ as to their intensivity.

4) The general amount of soluble salts, the quantity of chlorides and sulfates in the water of the springs gradually increases, as one advances from the Western to the Central part of Palestine.

5) The salts imported by the rains appear to be the cause for the saltiness of some springs situated in the coastal plain.

6) In comparison with the amount of N obtained from the rain the figures for N in the ground waters show the perpetual loss of it by the soil. This N in the natural conditions of Palestine is restored by the leguminosa and also through the activity of the nitrogen-fixing bacteria.

7) There is a great difference in the composition of spring water as compared with that of the rivers.

An important amount of nitrates, carbondioxide and traces of organic matter are present in spring waters. Contrary to these the waters of the rivers are slightly mineralized; and they indicate the presence of organic matter. The nitrate content is low, and CO₂ is absent.

The Dairy Herd at Beth-Alfa

by J. Kvashne

in collaboration with the Attendants of the Dairy Herd.

The special character of the dairy herd at Beth-Alfa is that a herd of Arab cows was purchased for the purpose of