

Ads from the Past

Soil Extract for Wound Healing

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This advertisement, published in July, 1945 shows the promotion of a solution for wound anti-sepsis. It was the culture extract of a bacillus, isolated from soil samples. Probably, this culture extract had some exotoxins secreted by the bacteria. Very cleverly, the advertisement emphasises an “earth-derived” panacea and thus, “natural”. This was supposed to increase its acceptability.

In 1939, Rene J. Dubos published an article in which he described a bacterium he had isolated from pooled soil samples. Addition of this bacterium concentrate to staphylococcal culture led to cell lysis in vitro. Thus, he deduced that this soil bacillus had anti-bacterial properties against gram-positive pathogenic bacteria. In USA, some Pharma companies (one of which is shown in this picture) seized on the commercial opportunities of this discovery and started selling the bacterial culture extract (mentioned here as Dubos' bacillus) for wound dressing.

Later experiments revealed the active antibiotics in these concentrates (synthesized by the soil bacilli): Tyrothricin and Gramicidin. Tyrothricin, shown in this image, was found to be very toxic and abandoned. Gramicidin is sometimes used still now. Although this was a very crude method of wound antibiotics, it was



FROM THE GOOD EARTH

...Tyrothricin (Mulford), a potent, bactericidal concentrate derived from Dubos' soil bacillus.

...When diluted to make isotonic solution containing 0.5 mg. per cc., Tyrothricin (Mulford) destroys gram-positive organisms in wounds, indolent ulcers and body cavities such as the paranasal sinuses, urinary bladder and pleural cavity.

HOW USED.... Topical application only. In diluted solution (0.5 mg. per cc.) by instillation, irrigation or wet dressing.

SUPPLIED.... 1-cc. ampule containing 25 mg. in 1 cc. with vial containing 49 cc. of pyrogen-free, sterile distilled water. For making 50 cc. of isotonic solution (0.5 mg. per cc.).

... 20-cc. vial of concentrate, 25 mg. per cc. For making 1000 cc. of isotonic solution (0.5 mg. per cc.)

TYROTHRINICIN
CONCENTRATED (HUMAN) MULFORD

Sharp & Dohme
PHILADELPHIA

an important step in anti-sepsis in that era, when antibiotics were still elusive.

REFERENCES

- 1 Dubos RJ — Studies on a bactericidal agent extracted from a soil bacillus. I. Preparation of the agent. Its activity in vitro. *J Exp Med* 1939; **70(1)**: 1-10
- 2 Dubos RJ — Studies on a bactericidal agent extracted from a soil bacillus: II. Protective effect of the bactericidal agent against experimental pneumococcus infections in mice. *J Exp Med* 1939; **70**: 11-7.

Science knows no country, because knowledge belongs to humanity, and is the torch which illuminates the world.

— Louis Pasteur