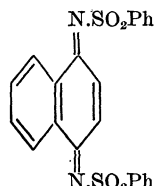


2-chloro-1 : 4-naphthoquinone dibenzenesulphonimide and *p*-quinone dibenzimide (Ib) undergo reduction to their corresponding amides when allowed to react with methyl- and ethylmagnesium halides. The reduction of the C=N by the Grignard solutions is a new example of the reducing action of Grignard reagent. (Ia₁) (Ib), and (II) are readily reduced by magnesium-magnesium iodide mixture to the corresponding *p*-quinone amides.



Ia, R = SO₂Ph; Ib, R = COPh



II

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Removal of Soft Parts of Snails by Freezing

THE troublesome problem of removing soft parts of fresh-water gastropods from their shells may be solved by using the following simple technique, which has not been previously reported. The living specimen, covered with water in a stoppered lip or shell vial, is placed in a freezing unit. After the water has frozen completely, the vial is removed to permit thawing at room temperature. The soft parts can then be extracted easily with forceps or dissecting needles.

The method was used successfully on many scores of specimens representing twelve species of fresh-water gastropods. Its advantages over previously reported methods (1) are: (1) soft parts may be removed *in toto*, (2) the viscera remain intact for possible morphological study, and (3) radulae and jaws are easily expelled by gentle downward pressure with a dissecting needle on the dorsal, posterior portion of the cephalic region.

The method is an improvement over those used by former workers in the field.

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A Rapid Technique for the Diagnosis of Intestinal Protozoa¹

FOR the past several months a new and simple technique for the rapid diagnosis of intestinal protozoa in feces with a single solution (tincture Metaphen, Abbott—tinted alcohol-acetone aqueous solution, 1:200) has been on trial in the parasitology laboratory of this activity. Because of the excellent results obtained, it is believed to be superior to other wet-staining techniques currently in use. With this method both the cysts and trophozoites of the intestinal protozoa can be clearly demonstrated.

The technique is as follows: A drop of stain, not diluted with saline or other solution, is placed on a glass microslide. A small particle of feces is stirred in until a smooth emulsion is formed. It is now ready to be examined under the low-power objective, the protozoa being readily detected, as they appear highly refractile. It is then necessary to change to either high dry or oil immersion for finer detail of the organism; high dry is usually sufficient. Better results are obtained when the feces are fresh, yet even formalin-preserved specimens are readily stained.

With this stain the nuclear and cytoplasmic details of the cysts are readily diagnostic. The cytoplasm assumes a greenish-yellow coloration, and the nuclei are in distinct contrast, with the jet-black granules of the nuclear ring clearly defined. The karyosome is likewise well demonstrated, this being of value in the differentiation of *Endamoeba coli* and *E. histolytica*. Chromatoid bars are clear and distinct.

The staining characteristics of the trophozoites are similar to that of the cysts. The pseudopodia are immediately fixed upon contact with the stain. Ingested erythrocytes and bacteria are in sharp contrast to the surrounding cytoplasm.

Unfortunately, *Dientamoeba fragilis* has not been observed, but the above observations are consistently true for the other ameba of man. The nuclear morphology and flagella of the intestinal flagellates are distinct, this being especially true with *Giardia lamblia*.

The advantages of this stain are multiple. The technique should be of value to all small laboratories, where facilities are limited. Its extreme simplicity allows for a rapid diagnosis of all the intestinal protozoa of man. It has also been found to be diagnostic for the rhabditiform larvae of hookworm and *Strongyloides*. The solution is stable and will not deteriorate on long standing. It is readily available and relatively inexpensive in comparison with other staining solutions.

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¹ The opinions contained in this paper are those of the authors. They are not to be construed as necessarily reflecting the views or the endorsement of the Navy Department.