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Transmissible gastroenteritis: demonstration of the virus from field specimens by means of cell culture and pig inoculation.

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Abstract

Isolation of transmissible gastroenteritis virus was attempted from segments of jejunum collected from piglets submitted for diagnosis of transmissible gastroenteritis. The virus was isolated more frequently in susceptible piglets than in pig kidney or pig thyroid cells. Practically, both cell systems were equally capable of demonstrating the virus when the tissue suspensions were sonicated. The pig thyroid cells prepared with glands collected from minimal disease pigs were preferred to the pig kidney cells for initial virus isolation because of their ability to respond to transmissible gastroenteritis virus with a progressive cytopathic effect. However,

the pig thyroid cells, prepared from pool of glands collected in abattoirs, were often contaminated with parvoviruses and could not be used for diagnostic work. Controlled ultrasound treatments of the inoculum increased the frequency of virus isolation in both cell systems.

Full text

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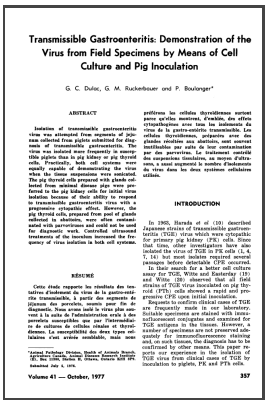
Transmissible Gastroenteritis: Demonstration of the Virus from Field Specimens by Means of Cell Culture and Pig Inoculation

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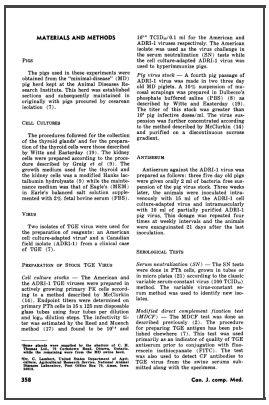
MATERIALS AND METHODS

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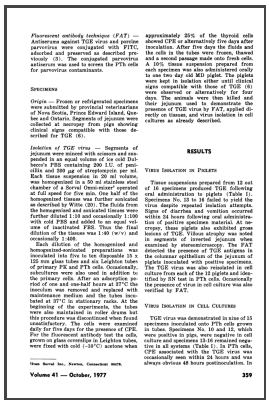
RESULTS

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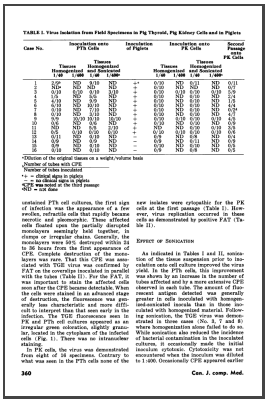
TABLE I. Virus Isolation from Field Specimens in Pig Thyroid, Pig Kidney Cells and in Piglets

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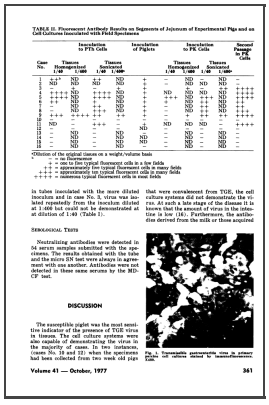
TABLE II. Fluorescent Antibody Results on Segments of Jejunum of Experimental Pigs and on Cell Cultures Inoculated with Field Specimens

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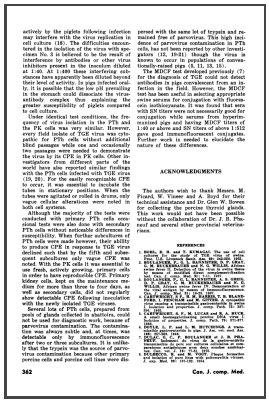
ACKNOWLEDGMENTS

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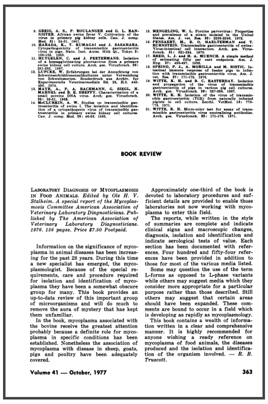

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Images in this article

Fig. 1.
on p.361

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