is common in the crossing of strawberry varieties but
that it has not been recognized because of the similarity
of the parent plants used. In the cases reported
here, the parent plants were so strikingly different in
size and appearance, in spite of their having the same
number of chromosomes, that paternal and maternal
inheritance could be easily recognized. The knowl-
edge that this type of inheritance can be obtained
from crossing two plants of the same chromosome
number which readily hybridize is useful in making
studies on inheritance, and it will obviate the neces-
sity of working with crosses between plants of dif-
ferent chromosome numbers which are rather difficult
to obtain. 6

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PASSIVE IMMUNITY TO INFECTION WITH
A LARVAL TAPEWORM OF THE
ALBINO RAT 7

The results of a preliminary experiment show
that the albino rat can be protected against infect-
ion with onchospheres of a cat tapeworm, Taenia
taeniaeformis, by transfer of serum from immunized
rats. This appears to be the first demonstration of
transfer of what are probably circulating antibodies
resulting from intra-peritoneal injections of cestode
material.

It has been shown 2 that an active acquired immu-
nity against infection by onchospheres of T.
taeniaeformis can be artificially produced in the
albino rat as a result of a standard series of six
intra-peritoneal injections of a 1 per cent. suspen-
sion of powdered worm material of the same species.
Complete or almost complete inhibition of develop-
ment of Cysticercous fasciolaris (larval stage of T.
taeniaeformis) in the liver of the rat resulted from the
injections; while cyst development took place normally,
for the most part, in control animals. Such
artificially immunized rats were used in the present
experiment as a source of the serum which was
donated to the experimental rats. Thirty-four rats
were given the standard series of injections from
July 24 to August 8, 1931; they were reinfected with
2 cc of a 1 per cent. suspension of worm material on
October 5 and 7. Serum was collected on October
9 and used the following day; normal serum from
stock rats was also obtained on October 9.

Fifty-nine rats from 6 litters born May 16 to
June 1, 1931, were used; individuals of each litter
were distributed through three groups: one (Group
A, 22 rats) to receive immune serum; another
(Group B, 12 rats), normal serum; and the third
(Group C, 25 rats) untreated. All rats were infected
with equal portions of a uniform suspension of
onchospheres, and the injection of serum begun 2
hours later. The rats of Group A received either 2.5
cc or 7 cc of immune serum intra-peritoneally, and
those of Group B either 3 cc or 7 cc of normal
serum. All animals were autopsied 34 to 38 days
after infection. The data are shown in the follow-
ing table.

Further experiments are in progress.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Number of rats</th>
<th>Average number of cysts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Living</td>
</tr>
<tr>
<td>Group A</td>
<td>7 cc immune serum</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>2.5 cc immune serum</td>
<td>3</td>
</tr>
<tr>
<td>Group B</td>
<td>3 cc or 7 cc normal serum controls</td>
<td>7</td>
</tr>
<tr>
<td>Group C</td>
<td>Uninjected controls</td>
<td>25</td>
</tr>
</tbody>
</table>

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BOOKS RECEIVED


6 No living cysts present in four rats.