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## *Isospora peromysci* Davis, 1967, in Northeastern Colorado

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***Isospora peromysci* Davis, 1967, in *Peromyscus maniculatus* in Northeastern Colorado**

Examination of 161 *Peromyscus maniculatus* and 11 *P. difficilis*, collected during the past

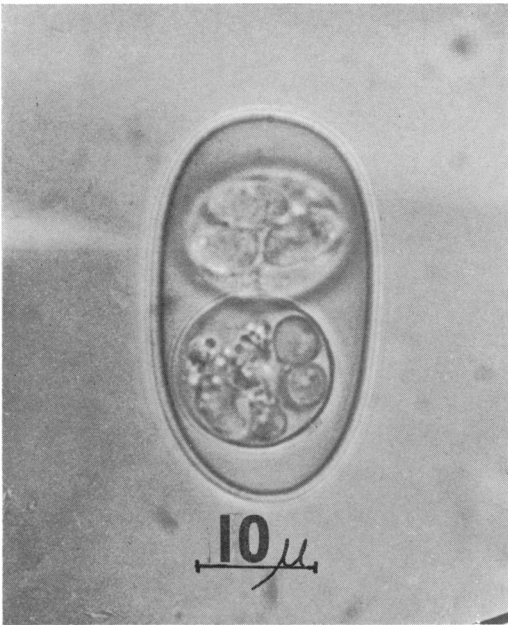


FIGURE 1. Sporulated oocyst of *Isospora peromysci*.

2½ years in the vicinity of Fort Collins, Colorado, revealed a species of coccidium of the genus *Isospora* in two of the *P. maniculatus*. Since no *Isospora* had been previously described from *Peromyscus*, we began a morphological study of the organism, but in the meantime, Davis (1967, J. Prot. **14**: 575–585) reported three new species of *Isospora* from white-footed mice in central California. One of these, *I. peromysci*, was obviously the organism with which we were working. Considering the distance involved in these two isolated reports of the same organism, it is interesting to note the remarkable similarity of our combined results (Table I).

This report constitutes a new geographic record of *I. peromysci* and adds a photomicrograph (Fig. 1) of the parasite which the original description did not include.

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TABLE I. Comparison of *Isospora peromysci*.

|                           | Davis, 1967                                                                | Present study                                                              |
|---------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Oocyst                    | 470 sporulated oocysts                                                     | 50 sporulated oocysts                                                      |
| shape                     | elongate to narrow ellipsoidal; one end occasionally flattened             | elongate-ellipsoidal with one end slightly flattened                       |
| size in $\mu$             | 25.2–43.2 $\times$ 14.0–27.5 $\mu$<br>$\bar{x}$ = 35.4 $\times$ 21.0 $\mu$ | 32.1–37.4 $\times$ 18.7–22.2 $\mu$<br>$\bar{x}$ = 35.5 $\times$ 20.1 $\mu$ |
| shape index               | 1.4–2.4; $\bar{x}$ = 1.77                                                  | 1.44–2.00; $\bar{x}$ = 1.77                                                |
| residuum                  | —                                                                          | —                                                                          |
| color                     | pale green to light brown                                                  | pale green to light yellow                                                 |
| Sporocyst                 | 113 sporulated oocysts                                                     | 50 sporulated oocysts                                                      |
| shape                     | broadly ovoid                                                              | ovoid                                                                      |
| size in $\mu$             | 12.6–20.9 $\times$ 10.6–15.1 $\mu$<br>$\bar{x}$ = 16.4 $\times$ 13.1 $\mu$ | 14.3–18.8 $\times$ 12.1–14.3 $\mu$<br>$\bar{x}$ = 16.5 $\times$ 13.0 $\mu$ |
| shape index               | 1.0–1.8; $\bar{x}$ = 1.26                                                  | 1.17–1.41; $\bar{x}$ = 1.27                                                |
| residuum                  | +                                                                          | +                                                                          |
| Stieda body               | —                                                                          | —                                                                          |
| Geographical distribution | Monterey County, California                                                | Larimer County, Colorado                                                   |
| Hosts                     | <i>P. maniculatus</i> , <i>P. truei</i> , <i>P. californica</i>            | <i>P. maniculatus</i>                                                      |
| Sporulation time          | some found sporulated in fresh feces, others took more than a month        | most oocysts sporulated in 6 days at 20 C                                  |