CONCLUSION AND RECOMMENDATION

Methods of preservation of Helicosporidium involving freezing without desiccation were highly successful. Preservation of spores within the intact host appeared to provide them better protection than either of the extenders used. The extender based on dimethyl sulfoxide appeared to provide better protection to frozen spore suspensions than that based on glycerine and egg yolk. Although it is not possible to make a definitive statement about the effects of duration of storage by these methods on spore infectivity, because of aberrancy resulting from temperature variation in the insectary, it appears that storage of duration considerably beyond four months would be possible with little loss of infectivity. Use of portable liquid nitrogen tanks for preservation and storage of field collected Helicosporidium, and liquid nitrogen preservation and low temperature freezer storage in the laboratory is recommended.

Preservation methods based on desiccation were relatively unsuccessful and are not recommended for this species.

Because of the importance of uniformity of experimental hosts in analytical studies of this nature, this kind of work should be conducted in laboratories equipped with insectaries with controlled temperature. It is essential to minimize the number of variables affecting experiments, especially when the effects of these variables and their interactions have not been quantified or are not clearly understood.