

ONE-LINER

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Killing mites without
killing Neurospora.

Methods for the eradication of mites are rarely mentioned, perhaps for the same reason that social diseases were so little discussed in the last century. Yet they can easily appear even in well-run laboratories. The usual approach is to autoclave all shelf-stocks, including nearly-ripe crosses and disinfect all surfaces. I recently stopped an infestation in its tracks by packing all cultures at risk into desiccators with lumps of dry ice in the bottom (about 100-200 g. dry ice per liter of capacity). The valve at the top was left open for the escape of air and CO₂, and the plates and tubes were let 'in an atmosphere of CO₂ for 2 days at room temperature. The lid was then removed, the cultures were allowed to sit in air so that any possibly resistant eggs could hatch, and the treatment was repeated. No mites could subsequently be found in any cultures. Ascospores shot before the treatment germinated normally, and immature crosses proceeded to maturity. Vegetative cultures remained viable, Mites are probably killed by acidification of their body fluids, while Neurospora is not harmed. - - - Department of Physiological Chemistry, University of Wisconsin, Madison, WI 53706.