

C. NETSCHER ¹⁾: *A rapid technique for mass-killing of nematodes with hot fixative.*

Though excellent results have been obtained with Seinhorst's technique for killing nematodes with hot acetic or propionic acid (Seinhorst, 1966, 1962; Netscher & Seinhorst, 1969), this method may be too time consuming if many nematode samples have to be killed. This is mainly due to the fact that concentrating the nematodes in a small drop of water before killing them, by drawing off the excess water, is an operation that must be done very carefully.

Nematodes collected in large numbers can be concentrated for subsequent killing in bulk by vacuum-filtering the suspension. As soon as the filter appears dry, a hot f.p. 4 : 1 or f.a. 4 : 1 solution is poured on to it. After drawing off the liquid the nematodes are immediately washed from the filter with a little 4% formaldehyde into a small vessel. After fixation the nematodes may be processed to glycerin by the alcohol method (Seinhorst, 1959).

A very handy device for filtering the nematodes is the Milipore Pyrex filter holder equipped with a suitable filter (Ederol filters were used in this study).

The disadvantage of this method is that an important number of nematodes may be lost, especially small specimens, as shown in the following table.

Number of nematodes recovered after concentrating and killing on Ederol filter

Species	Number of nematodes killed	Number of nematodes recovered
<i>Meloidogyne</i> sp. (larvae)	340	232
<i>Scutellonema bradys</i>	614	540

Fixation has been excellent in *Meloidogyne* sp. (larvae and males), *Heterodera oryzae* (larvae), *Scutellonema bradys* and *Hemicycliophora paradoxa*. Details usually difficult to observe, like the hemizonid and rectum of larvae of *H. oryzae*, were easily seen in specimens killed by this method.

NETSCHER, C. & SEINHORST, J. W. (1969). Propionic acid better than acetic acid for killing nematodes. *Nematologica* **15**, 286.

SEINHORST, J. W. (1959). A rapid method for the transfer of nematodes from fixative to anhydrous glycerin. *Nematologica* **4**, 67-69.

— (1962). On the killing, fixation and transferring to glycerin of nematodes. *Nematologica* **8**, 29-32.

— (1966). Killing nematodes for taxonomic study with hot F.A. 4 : 1. *Nematologica* **12**, 178.

¹⁾ O.R.S.T.O.M., B.P. 1386, Dakar, Sénégal.

12 MAI 1972

O. R. S. T. O. M.

M Collection de Référence

71 no 5434

Phyto?
Biol Stinet