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APPLICATION OF THE PARAFFIN RING METHOD FOR PREPARATION OF TEMPORARY MOUNTS WITH NEMATODES

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Accepted: May 22, 2001

Key words: nematodes, mounting, microscopic slides

The necessity of identification of great numbers of soil and plant nematodes is a basic element of nematologists' work. Nematodes can be observed and distinguished only with the help of a microscope, and for that reason there is a need for preparing microscopic slides. In many cases samples of soil and plants, subjected to nematological research contain up to several thousands of specimens. Therefore there is a hope that applying such tech-

nique for preparation of temporary mounts will facilitate nematode identification.

• A second probabilitation of the description of the second state o state of the second state of the s Among different methods of preparation of microscopic slides, simple temporary mounts are most often used for tentative identification of examined species. For long years, such slides were prepared with the help of one of the most standard methods, that is the "glass wool supports" method (Hooper 1986). Moreover, this method has some disadvantages. It is very laborious and time-consuming, that results from the necessity of fixing glass wool supports for the cover glass. Apart from this, during placing on the cover glass, pieces of glass fibres and nematodes often float to the edges of the slide, thus making the identification impossible.

An attempt to adapt the paraffin ring method, known in literature as a method for making permanent mounts (Maeseneer and D'Herde 1963; Hooper 1986), for preparation of temporary mounts was made in our laboratories. The results turned out to be very successful. In order to prepare such temporary mounts, nematodes are fixed in 2% formalin solution (the Seinhorst procedure is omitted), and placed in a drop of 2% formalin solution on a microscopic slide within a ring of paraffin wax. After placing the cover glass, the slide is gently heated over a flame until the paraffin is molten. While the paraffin is setting, a visible ring of wax arises, preventing the contents inside from drying and floating beyond a cover glass.

Temporary slides prepared with this method are much more stable than the ones prepared in the traditional way with glass wool supports. They can last without drying out for several weeks. After such a long time all nematodes' structures are still distinctly visible providing that paraffin after being set isolates the suspension with nematodes from the outside within the whole periphery of a cover glass. The wax plays a role of cover glass supports. Thus laborious fixing of the glass fibres is not necessary. It makes the method much less time-consuming.

Paraffin used for preparation of temporary mounts must be of possibly the lowest melting temperature (not higher than 55–60°C).

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ZASTOSOWANIE METODY PARAFINOWEJ DO WYKONYWANIA TYMCZASOWYCH PREPARATÓW Z NICIENIAMI

STRESZCZENIE

Dotychczasową metodę wykonywania preparatów tymczasowych, wykorzystującą podpórki z waty szklanej, zastąpiono metodą parafinową, która dotąd była zalecana do wykonywania preparatów trwałych. Z doświadczeń wynika, że może ona być z powodzeniem stosowana do preparatów tymczasowych.