

# of *Aphelenchoides besseyi*, (Tylenchida, Nematoda) ice seedling extract from various distances

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## Materials and Methods

Rice seeds (Pal-Goeng variety) were germinated in a petri-dish after surface sterilization with 0.1% mercuric chloride for 30 minutes followed by washing in sterile distilled water 3 times.

Sprouts of 8 seedlings were removed when they were 1cm long and macerated in a glass cavity block with a round bottomed glass tube, adding a drop of water to make four 0.5cm diameter filter paper discs be moistened. One of these "seedling discs" was placed at the center of a 2% water agar plate prepared 24 hours before use.

One hour later, four female nematodes of *Aphelenchoides besseyi* from the population grown on *Alternaria tenuis* were placed on the agar surface at one, two, three and four centimeter distances respectively from the center of the agar plate at which a seedling disc had been placed after surface sterilization with mercuric chloride. Each nematode was traced under a stereoscopic dissecting microscope to make a track for each nematode until it reached the seedling disc or disappeared from the agar surface to the rim of the petri-dish.

## Result

In two of the four observations, all of four nematodes on the plate were attracted to the central seedling disc within 3 hours and 42 minutes. In the third observation, the nematode, 4cm apart from the center, disappeared 2 hours and 53 minutes after beginning, but all four nematodes were detected from the centrally located seedling disc 24 hours later.

In the fourth observation, the 4 cm apart nematode disappeared 3 hours and 14 minutes after beginning and was not detected from the seedling disc even after 24 hours.

The shortest, the longest and the average times for nematodes to reach the central seedling disc from different distances and shown in the following table.

**Table 1.** Time needed for *A. besseyi* to reach the seedling disc from various distances.

Distance	Shortest	Longest	Average
1 cm	10 min.	55 min.	38.8 mn.
2 cm	1 hr. 5 min.	3 hr. 3 min.	2 hr. 9.8 min.
3 cm	3 hr. 10 min.	4 hr. 58 min.	3 hr. 44 min.
4 cm	2 hr. 55 min.		

Observing and tracing the nematods, it was noticed that they were rarely attracted freely, moving forward and backward, making very complicated track.