

## Abstrak

*Ditylenchus dipsaci* merupakan nematoda parasit penting yang menyerang berbagai tanaman ekonomis di hampir seluruh wilayah di dunia. Kerugian yang ditimbulkan akibat serangan *D. dipsaci* berkisar 50-90%. Kisaran inang *D. dipsaci* sangat luas mencapai 500 spesies tanaman berupa tanaman budidaya maupun gulma. Salah satu cara pengendalian *D. dipsaci* adalah dengan tanaman tahan dan rotasi tanaman yang erat hubungannya dengan kisaran inang. Penelitian ini bertujuan untuk mengetahui status inang berbagai tanaman dan tumbuhan liar terhadap *D. dipsaci*. Tata laksana penelitian diawali dengan melakukan survey, observasi, dan pengambilan sampel di sentra pertanaman bawang putih di Provinsi Jawa Tengah yaitu Magelang, Temanggung, Brebes, dan Tegal. Setelah diperoleh sampel, dilanjutkan diagnosis kisaran inang menggunakan metode pengecatan akar. Pengecatan akar dilakukan dengan metode Byrd. Setelah didiagnosis, dilakukan uji konfirmasi kisaran inang. Hasil penelitian menunjukkan bahwa bawang putih, bawang merah, daun bawang, bunga kol, brokoli, sawi hijau, selada, jagung, cabai, seledri, timun, kentang, dan wortel adalah inang *D. dipsaci*. Kubis, ubi jalar, dan talas bukan inang *D. dipsaci*. Gulma yang menjadi inang *D. dipsaci* yaitu babandotan. Marcella, rumput belulang, dan jotang kuda bukan inang *D. dipsaci*.

Kata Kunci : *Ditylenchus dipsaci*, nematoda parasit, kisaran inang

### *Abstract*

*Ditylenchus dipsaci* is an important plant parasitic nematode that attacks on various economical plants in almost all regions in the world. Crop loses caused by *D. dipsaci*'s attacked ranges from 50-90%. *D. dipsaci*'s host range is very wide reaching 500 different plant species including the cultivated and weed plants. One option to control *D. dipsaci* is uses plant resistance and crop rotation that are closely related to the host range. The aim of this research was to determine the host status of various plants and wild plants against *D. dipsaci*. The research was carried out by conducting survey, observation, and collecting sample at the center of garlic planting in Central Java situated in Magelang, Temanggung, Brebes, and Tegal. The host range of this nematode was diagnosed using a root painting method called the Byrd method. After being diagnosed, the host range confirmation test is carried out. The results showed that garlic, shallot, leek, cauliflower, broccoli, green mustard, lettuce, corn, chili, celery, cucumber, potatoes, and carrots are postively the hosts of *D. dipsaci*. Whereas cabbage, sweet potato, and taro are not the host of *D. dipsaci*. *D. dipsaci*, also attacked to weed, including babandotan. Marcella, rumput belulang, and jotang kuda are not the host of *D. dipsaci*.

**Keywords :** *Ditylenchus dipsaci*, parasite nematode, host range