

## Cauliflower (*Brassica oleracea* C.v. *capitata*) cyst nematode in Libya

E. A. EDONGALI AND KHALIFA H. DABAJ<sup>1</sup>

### ABSTRACT

Spherical to lemon shape white females, brown and dark cysts with projecting necks have been found on the roots and in the soil. They have ambifenestrate vulval cone with semifenestral arches separated by a narrow vulval bridge. This description fits the *Heterodera cruciferae* Franklin (1945), in which it is a new record on cauliflower in Libya.

Cauliflower is a cruciferous crop widely grown by farmers both for local markets and home gardens. During routine sampling at Shutt-Elhinshir and Ain-Zara, white females of a cyst were observed in the soil and on the roots. Soil and plant materials were examined in the laboratory. Spherical to lemon shape, white brown and dark-brown females (cysts) with projecting necks were observed. The female has a large gelatinous matrix (egg sac) almost as large as the female body and containing many eggs. Males were vermiform with rounded tails, offset heads, and heavily sclerotized head skeleton. Second stage juveniles having robust stylets, massive basal knobs with terminal hyaline zone were dominant (3, 4). Few juveniles with round to biforked tails have been observed in the samples. The cyst vulval cone is ambifenestrate with very low semifenestral arches separated by a narrow vulval bridge.

According to the above stated description, this cyst nematode closely fits that of *Heterodera cruciferae* Franklin (1945) (1, 2) in which it is the first record from Libya.

Further investigations on its distribution, hostpathogen-relationships, economic losses, and other associated plant-parasitic nematodes will be a great future task to be tackled.

### LITERATURE CITED

1. Fenwick, D. W. and M. T. Franklin. 1951. Further studies on the identification of *Heterodera* species by larval length parameters for eight species and varieties. *J. Helminth.* 25: 57-76.
2. Franklin, Mary T. 1945. On *Heterodera cruciferae* n. sp. of Brassicas, and on a *Heterodera* strain infecting clover and Dock. *J. Helminth.* 21: 71-84.
3. Mulrey, R. H. 1972. Identification of *Heterodera* cysts by terminal and cone top structures. *Can. J. Zool.* 50: 1277-1292.
4. Stone, A. R. and Janet, A. Rowe. 1976. *Heterodera cruciferae* C.I.H. description of plant parasitic nematodes set 6, No. 90.

<sup>1</sup>Department of Plant Protection, College of Agriculture, University of Al-Fateh, Tripoli, S.P.L.A.J.

نباتودا الحويصلات الصليبية في ليبيا  
د . الزروق أحمد الدنقلي وم . خليفة حسين دعجاج

تم العثور على حويصلات بيضاء وكذلك بنية إلى سوداء اللون على نبات القربيط (أبو زهره) في كل من شط الهنشير وعين زارة .

وبعد فحص التربة تبين وجود ذكور والطور الثاني (الغير البالغ) ، بأعداد كبيرة لنباتودا الحويصلات .

أخذ قطاع بالذبل المخروطي للأثنى (حويصلة) ، وقد تبين أنها تنطبق وصفيًا مع (*Heterodera cruciferae*) وهي نباتودا حويصلات الصليبيات . هذا النوع من النباتودا يكتشف لأول مرة في ليبيا .