

STUDIES ON CERCOSPORA AND ALLIED GENERA IN CHINA IV.*

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ABSTRACT: Nine species of *Cercospora* are reported, including two new species on Compositae: *Cercospora cacaliae* and *C. cynarae*, and seven new records for China: *C. demetroniana*, *C. glothidicola*, *C. glycyrrhizae*, *C. malloti*, *C. manihobae*, *C. psoraleae-bituminosae* and *C. traversiana*. Latin diagnoses, English descriptions, and illustrations of the new species are given. Specimens examined are deposited at HMAS.

KEY WORDS: *Cercospora*, *C. cacaliae*, *C. cynarae*, New species

Cercospora cacaliae Y. L. Guo & Y. Jiang sp. nov. Fig. 1

Maculae amphigenae, angulares vel irregulares, 2~12 mm latae, saepe confluentes, pallide flavo-brunneae, flavo-brunneae vel brunneolae. Caespituli amphigeni. Stromata nulla vel minutissima ex cellulis globosis brunneis composita. Conidiophora solitaria vel laxe 2~10-fasciculata, brunneola, erecta vel curvata, non ramosa, 2~6-geniculata, 2~9-septata, $54.0\sim367.5 \times 4.0\sim7.5 \mu\text{m}$. Cicatrices conspicue incrassatae, $2.0\sim3.0 \mu\text{m}$ latae. Conidia acicularia hyalina, erecta vel curvata, ad apicem acuta vel obtusa, ad basim obconico-truncata vel truncata, indistincte multiseptata, $60.0\sim187.5 \times 3.0\sim5.0 \mu\text{m}$.

Hab. in foliis vivis *Cacaliae* sp. (Compositae): Erlangshan, Sichuan Provincia, Sina, 17 IX 1958, leg. Liu XJ & Song MH, no. 767 (HMAS 77716, Holotypus).

Leaf spots amphigenous, angular to irregular, 2~12 mm wide, often confluent, pale yellow-brown, yellow-brown to brownish on the upper surface, pale yellow-brown to yellow-brown on the lower surface. Fruiting amphigenous, chiefly hypogenous. Stromata none or only a few brown globose cells. Conidiophores solitary or loosely 2~10-fasciculate, pale brown, paler towards the apex, irregular in width, straight to curved, not branched, 2~6-geniculate, conically truncate at the apex, 2~9-septate, $54.0\sim367.5 \times 4.0\sim7.5 \mu\text{m}$. Conidial scars conspicuously thickened, $2.0\sim3.0 \mu\text{m}$ wide. Conidia acicular, shorter ones cylindrical, hyaline, straight to curved, apex acute to obtuse, obconically truncate to truncate at the base, indistinctly multiseptate, $60.0\sim187.5 \times 3.0\sim5.0 \mu\text{m}$.

Cercospora arctii-ambrosiae Halst. (in Symb. & Earle, Econ. Fungi 296, 1893) on *Arctium* spp. is very similar to this species. It differs by its pale brown to brown, longer and narrower conidiophores ($58.8\sim426.1 \times 3.5\sim6.3 \mu\text{m}$) and longer and narrower conidia ($39.5\sim263.0 \times 2.6\sim4.0 \mu\text{m}$).

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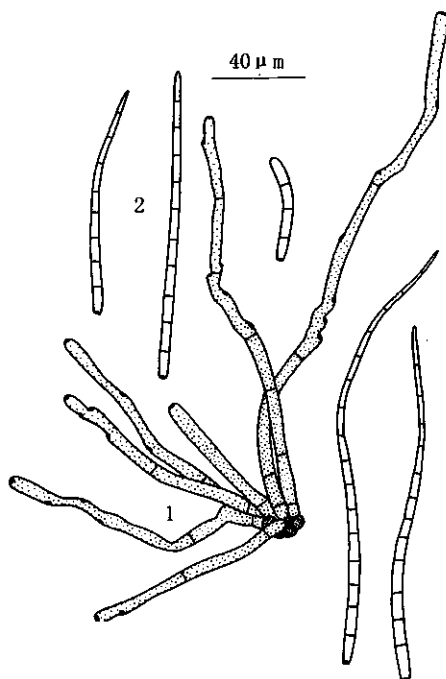


Fig.1 *Cercospora cacaliae* Y.L.Guo & Jiang

1. Conidiophores; 2. Conidia

Cercospora cynarae Y. L. Guo & Y. Jiang sp. nov. Fig. 2

Maculae amphigenae, suborbiculares, 2-10 mm diam., centro griseo-albae, margine atro-brunneae. Caespituli amphigeni. Stromata nulla vel parva, brunnea. Conidiophora 2-11-fasciculata, modice brunnea, erecta vel curvata, rare ramosa, 0-5-geniculata, multiseptata, $81.5-352.0 \times 3.7-5.0 \mu\text{m}$. Cicatrices conspicue incrassatae, $2.3-3.4 \mu\text{m}$ latae. Conidia acicularia, hyalina, erecta vel curvata, ad apicem acutata, ad basim truncata, indistincte multiseptata, $40.0-225.0 \times 2.0-4.4 \mu\text{m}$.

Hab. in foliis vivis *Cynarae scolymi* L. (Compositae): Nanjing, Jiangsu Provincia, Sina, 11 IX 1961, leg. Liu XJ & Ma QM, no.245 (HMAS 77724, Holotypus).

Leaf spots amphigenous, subcircular, 2-10 mm diam., often raised, at first brown, later with greyish white center and dark brown margin on the upper surface, indistinct on the lower surface. Fruiting amphigenous. Stromata none or small, brown. Conidiophores 2-11-fasciculate, medium brown, uniform in color, irregular in width, straight to curved, rarely branched, 0-5-geniculate, conically truncate to truncate at the apex, multiseptate, $81.5-352.0 \times 3.7-5.0 \mu\text{m}$. Conidial scars conspicuously thickened,

2.3~3.4 μm wide. Conidia acicular, hyaline, straight to curved, apex acute, truncate at the base, indistinctly multiseptate, $40.0\sim225.0 \times 2.0\sim4.4 \mu\text{m}$.

Cercospora obscura Heald & F. A. Wolf (Mycologia 3:19, 1911) was also described on *Cynara scolymus* L., but it differs from the present fungus in having colored, cylindrical, catenulate conidia.

Cercospora cirsii Ellis & Everh. (Proc. Acad. Nat. Sci. Phila. 46:379, 1894) on *Cirsium remotifolius* Gray is similar to the new species, but differs in possessing stromata (up to 50 μm diam.) and densely fasciculate, not geniculate, shorter and slightly wider conidiophores ($10.0\sim25.0 \times 4.0\sim6.0 \mu\text{m}$) and cylindric-obclavate, rarely acicular, hyaline to subhyaline, shorter conidia ($20.0\sim90.0 \times 3.0\sim4.5 \mu\text{m}$).

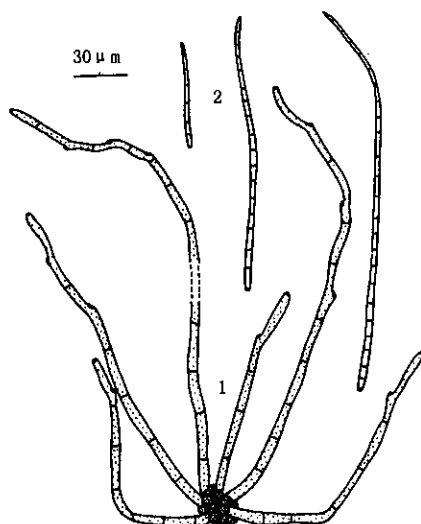


Fig.2 *Cercospora cynarae* Y. L. Guo & Y. Liang
Conidiophores; 2. Conidia

Cercospora demetroniana G. Winter, Hedwigia 23:170, 1884.

On *Crotalaria juncea* L. (Leguminosae): Chengdu, Sichuan Province (HMAS 78970)

Cercospora glothidiicola Tracy & Earle, Bull. Torrey Bot. Club 23:206, 1896.

On *Sesbania cannabina* (Retz.) Poir. (Leguminosae): Chengdu, Sichuan Province (HMAS 78972).

Cercospora glycyrrhizae (Săvulescu & Sandu) Chupp, A Monograph of the Fungus Genus

Cercospora. p.308, 1954.

Cercosporina glycyrrhizae-echinatae Săvulescu & Sandu, Hedwigia 75:227, 1935.

On *Glycyrrhiza pallidiflora* Maxim. (Leguminosae): Beijing (HMAS 78973).

On *Glycyrrhiza uralensis* Fisch.: Tongyu, Jilin Province (HMAS 78974).

Cercospora malloti Ellis & Everh., Jour. Mycol. 4:114, 1888.

On *Mallotus apelta* (Lour.) Muell.-Arg. (Euphorbiaceae): Guangzhou, Guangdong Province (HMAS 78822, 78823)

Cercospora manihobae Viégas, Bol. da Soc. Brasil. de Agron. 8:38, 1945.

On *Manihot esculenta* Crantz. (Euphorbiaceae): Longjin, Guangxi Province (HMAS 78824)

Cercospora psoraleae-bituminosae Săvul. & Sandu, Mem. Sec. St. Acad. Rom., Ser. 3, 15(17):485, 1940.

On *Cyamopsis tetragonoloba* (L.) Taub. (Leguminosae): Jinghong, Yunnan Province (HMAS 78988).

Cercospora traversiana Sacc., Ann. Mycol. 2:18, 1904.

On *Trigonella foenium-graecum* L. (Leguminosae): Hunan Province (HMAS 78989).

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中国尾孢菌属及其近似属的研究 VI.

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摘要: 本文报道 9 种尾孢菌, 其中有 2 个新种: 蟹甲草尾孢 *Cercospora cacaliae* Y. L. Guo & Y. Jiang 和菜蓟尾孢 *Cercospora cynarae* Y. L. Guo & Y. Jiang, 中国新记录种有迪氏尾孢 *Cercospora demetroniana* G. Winter, 田菁生尾孢 *Cercospora glothidiicola* Tracy & Earle, 甘草尾孢 *Cercospora glycyrrhizae* (Săvulescu & Sandu) Chupp, 野桐尾孢 *Cercospora malloti* Ellis & Everh., 木薯尾孢 *Cercospora manihobae* Viégas, 补骨脂尾孢 *Cercospora psoraleae-bituminosae* Săvul. & Sandu 和香豆尾孢 *Cercospora traversiana* Sacc.。文中为新种提供了拉丁文描述并附图, 研究的标本保存在中国科学院微生物研究所菌物标本馆(HMAS)。

关键词: 尾孢菌属, 蟹甲草尾孢, 菜蓟尾孢, 蒿尾孢, 新种

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