

尾孢属的几个新种

陈少勤 戚佩坤

(植保系)

提 要

本文报导了作者1935~1987年间在广东省肇庆地区调查栽培药用植物病害过程中发现的尾孢属新种: *Cercospora alpinicola* sp. nov. 寄生于益智 (*Alpinia oxyphylla* Miq.), *C. alpini-katsumadaicola* sp. nov. *C. alpini-katsumadae* sp. nov. 寄生于草豆蔻 (*Alpinia katsumadai* Hayata), *C. andrographicola* sp. nov. 寄生于穿心莲 (*Andrographis paniculata* (Burm.f.) Nee.), *C. sauropi* sp. nov. 寄生于龙利叶 (*Sauropus spatulifolius* Beille) *C. evodio-rutaecarpae* sp. nov. 寄生于吴茱萸 (*Evodia rutaecarpa* (Juss.) Benth.), *C. pueraria-thomsoni* sp. nov. 寄生于葛 (*Pueraria thomsoni* Benth.). 文中对以上各菌进行了形态学描述。标本存华南农业大学植保系标本室。

关键词 益智生尾孢; 草豆蔻尾孢; 草豆蔻生尾孢; 龙利叶尾孢; 吴茱萸尾孢; 葛尾孢; 穿心莲生尾孢

益智尾孢 新种 图 1

Cercospora alpinicola S. Q. Chen et P. K. Chi sp. nov. fig. 1

Maculae amphiphyllae, ellipticae, margine brunneae, centro pallido-brunneae, striolis brunneis undulatis praeditae; Caespituli amphiphylli; Stroma minutum, olivaceo-brunneum, 23-67(45) μm in diam.; Conidiophora 10-55 (21) fasciculata, olivacea, raro ramosa. 2-5(3) septata, 0-2 geniculata, apicem conico truncata, 40.0-66.3 (55.3) \times 3.3 μm ; Cellulae conidiogenae synpothiales, cicatricibus distinctioribus; Conidiae subhyalinae vel pallido-olivacea, obclavatae, ad apicem obtusae, ad basin conico-truncatae, 3-11(6) septatae, 40.0-79.9(61.7) \times 1.7-3.3 μm .

Hab. in foliis vivis *Alpinia oxyphylla* Miq., Gaoyao, Guangdong Provincia IV 1987 S. Q. Chen 102 (Typus)

Species similis *Cercospora alpiniae* H. & P. Sydow sed a qua differt conidiophoris medio-brunneis vel atrobunneis, latioribus(5-8 μ).

叶片上病斑叶二面生, 椭圆形, 边缘褐色, 中央淡褐色, 有波状褐色线纹。子实体叶二面生, 子座小, 榄褐色, 直径23~67(45) μm ; 分生孢子梗10~55(21)根簇生, 榄色, 偶而分枝, 2~5(3)个分隔。0~2个膝状节, 顶端圆锥截形, 产孢细胞合轴生, 孢痕明显, 40.0~66.3(55.3) \times 3.3 μm ; 分生孢子近无色至淡榄色,

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倒棍棒状, 顶端钝, 基部圆锥截形, 3~11(6)个隔膜, $40.0\sim 79.9(61.7)\times 1.7\sim 3.3\mu\text{m}$ 。

寄主: 益智。产地: 广东高要。1987年4月, 陈少勤 102(模式标本)。

本菌不同于 *Cercospora alpiniae* H. & P. Sydow 后者分生孢子梗弯曲, 顶端圆, 分生孢子中度至暗褐色, 宽度大($5\sim 8\mu\text{m}$)。与洪祥千报道的 *C. gomphrenae* Saw. 差别更大, 该菌分生孢子针状, 无色透明, 基部截形, 主要为害苋科的千日红属 (*Gomphrena*)。

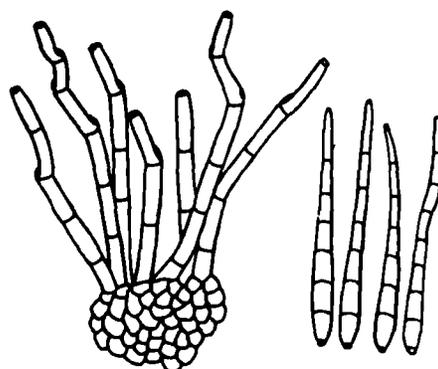


图1 益智尾孢
子座, 分生孢子梗及分生孢子

草豆蔻生尾孢 新种 图2

Cercospora alpini-katsumadaicola S. Q. Chen et P. K. Chi sp. nov. fig. 2

Maculae amphiphyllae, orbiculares vel ellipticae, margine fulvidae vel brunnae, centro griseo-brunneae; Caespituli epiphylli; Stroma globosum, minutum, olivaceum, $20\sim 50(39)\mu\text{m}$ in diam.; Conidiophora $5\sim 5(16)$ fasciculata, brevissima, simplicia, pallide olivacea vel olivacea, 0-1 geniculate, apicem subtruncata vel conico-truncatae, cicatricibus indistinctioribus $3.3\sim 10.0(7.8)\times 2.7\sim 3.3\mu\text{m}$; Conidiae hyalinae, obclavatae, apicem obtusae, basi conico-truncatae, 4-10(7) septatae, $33.3\sim 76.6(55.3)\times 2.7\sim 3.3\mu\text{m}$ 。

Hab. in foliis vivis *Alpinia katsumadae* Hayata, Yunan, Guangdong Provincia, X 1987, S. Q. Chen 111 (Typus)

Species similis *Cercospora alpiniae* H. & P. Sydow et *C. alpinicola* S. Q. Chen et P. K. Chi sed a quibus differunt Conidiophoris brevissimis, conidis hyalinis.

叶片上病斑叶二面生, 圆形至椭圆形, 边缘黄至褐色, 中央灰褐色。子实体叶面生, 子座球形, 小, 褐色, 直径 $20\sim 50(39)\mu\text{m}$; 分生孢子梗 $5\sim 50(16)$ 根簇生, 很短, 不分枝, 淡褐色至褐色, 0~1个隔膜, 0~1个膝状节, 顶端近截形至圆锥截形, 孢痕不明显, $3.3\sim 18.0(12.8)\times 2.7\sim 3.3\mu\text{m}$; 分生孢子无色, 倒棍棒状, 顶端钝, 基部圆锥截形, 4~10(7)个隔膜, $33.3\sim 76.6(55.3)\times 2.7\sim 3.3\mu\text{m}$ 。

寄主: 草豆蔻。产地: 广东郁南。1987年10月, 陈少勤, 111(模式标本)

本菌不同于 *Cercospora alpiniae* H. & P. Sydow 及上述 *C. alpinicola* S. Q. Chen et P. K. Chi, 分生孢子梗很短, 分生孢子无色。

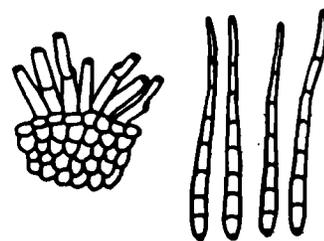


图2 草豆蔻生尾孢
子座 分生孢子梗及分生孢子

草豆蔻尾孢 新种 图3

Cercospora alpini-katsumadae S. Q. Chen et P. K. Chi sp. nov. fig. 3

Maculae amphiphyllae, ellipticae vel irregulares, margine brunneae, centro cinereo-albidae; Caespituli epiphylli; Stroma minutum, globosum, olivaceo-brunneum vel brunneum, $23\sim 67$

(41) μm in diam.; Conidiophora 5-25 (13) fasciculata, olivaceo-brunnea, simplica, 3-13 (7) septata, 0-3 geniculata, apicem pallido-olivaceae, subtruncatae vel conico-truncatae, $99.9-266.4(163.6) \times 3.5-5.0(4.2)\mu\text{m}$; Cellulae conidiogerae sympociales, cicatricibus distinctioribus; Conidiae hyalinae, acutioris, apicem obtusae vel acutioris, basi truncatae vel subtruncatae, 10-20(15) septatae, $166.5-333.0(264.7) \times 2.7-3.3\mu\text{m}$.

Hab. in foliis vivis *Alpinia katsumadai* Hayata, Yun. pr., Guangdong Provincia X 1987 S. Q. Chen 112(Typus)

Ab affinis distincta Conidiis hyalinis, acutioribus, 10-20 (15) septatis, basi truncatis v. subtruncatis.

病斑叶二面生，椭圆形至不规则形或长条形，边缘褐色，中央灰白色。子实体叶面生。子座小，球形，棕褐色至褐色，直径23~67(41) μm ；分生孢子梗5~25(13)根簇生，棕褐色，不分枝，3~13(7)个隔膜，0~3个膝状节，顶端淡褐色，近截形至圆锥截形，孢痕明显，产孢细胞合轴生， $99.9-266.4(163.6) \times 3.5-5.0(4.2)\mu\text{m}$ ；分生孢子无色，针状，顶端钝至尖，基部截形至近截形，10~20(15)个隔膜， $166.5-333.0(264.7) \times 2.7-3.3\mu\text{m}$ 。

寄主：草豆蔻。产地：广东郁南。1987年10月，陈少勤，112(模式标本)。

本菌不同于良姜属(*Alpinia*)上的各个尾孢菌，分生孢子无色，针形，分隔很多，基部截形至近截形。

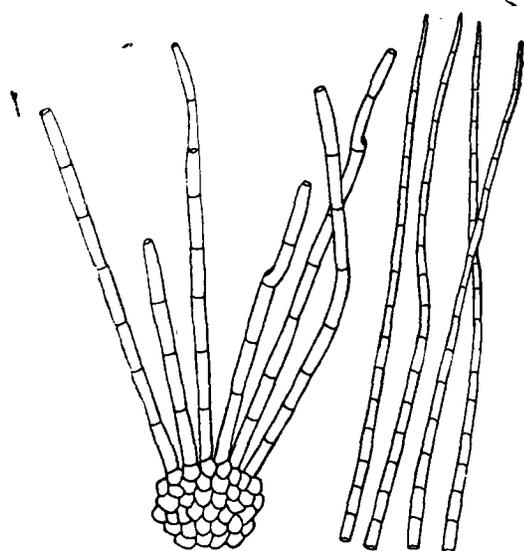


图3 草豆蔻尾孢
子座，分生孢子梗及分生孢子

龙利叶尾孢 新种 图4

Cercospora suropi S. Q. Chen et P. K. Chi sp. nov. fig. 4

Maculae amphiphylae, orbiculares, margine atro-brunneo, indistinctae, centro pallidae, annulatae; Caespituli amphiphylis; Stroma evolutum, olivaceo-brunneum, 26-172 (54) μm in diam.; Conidiophora 10-27 (15) fasciculata, olivacea, simplica, erecta, 1-11(3) septata, 0-2 geniculata, apicem subtruncata, cicatricibus distinctioribus; $44.1-122.5(85.2) \times 3.4-5.4(4.7)\mu\text{m}$; Cellulae conidiogerae sympociales; Conidiae hyalinae, acutioris, apicem acutae vel subobtusae, basi truncatae vel subtruncatae, 6-16(11) septatae, $48.6-160.8(85.8) \times 2.4-4.9(3.3)\mu\text{m}$.

Hab. in foliis vivis *Sauropus spatulifolius* Etelle., Gaoyao, Guangdong Provincia, X 1986, S. Q. Chen, 118(Typus)

Species similis *Cercospora breyniae-rhamnoides* Thirumal, sed a qua differt conidiis pallide

olivaceo-brunneis, obclaviformis vel cylindricis.

病斑叶二面生，圆形，边缘黑褐色，不清晰，中央色淡，灰白色，具同心轮纹。
子实体叶二面生，子座较发达，榄褐色 $26\sim 172(54)\mu\text{m}$ ；分生孢子梗 $10\sim 27(15)$
根簇生，直立，不分枝，榄褐色， $0\sim 2$ 个膝状节， $1\sim 11(3)$ 个隔膜，顶端近截
形，产孢细胞合轴生，孢痕显著， $44.1\sim 122.5(85.2)\times 3.4\sim 5.4(4.7)\mu\text{m}$ ；
分生孢子无色，针状，基部截形至近截形，顶端尖至钝， $6\sim 16(11)$ 个隔膜， 48.6
 $\sim 160.8(85.8)\times 2.4\sim 4.9(3.3)\mu\text{m}$ 。

寄主：龙利叶。产地：广东高要。1986年10月。陈少勤 118(模式标本)

国内外尚无寄生在守宫木属(*Sauropus*)植物上的尾孢菌的报导，大戟科中黑石
神属(*Breynia*)与守宫木属的亲缘关系较近，本菌与*B. rhamnoides*上的尾孢菌(*C.*
breynae-rhamnoides Thirumal)不同，后者分生孢子淡榄褐色，倒棍棒形或圆筒形。

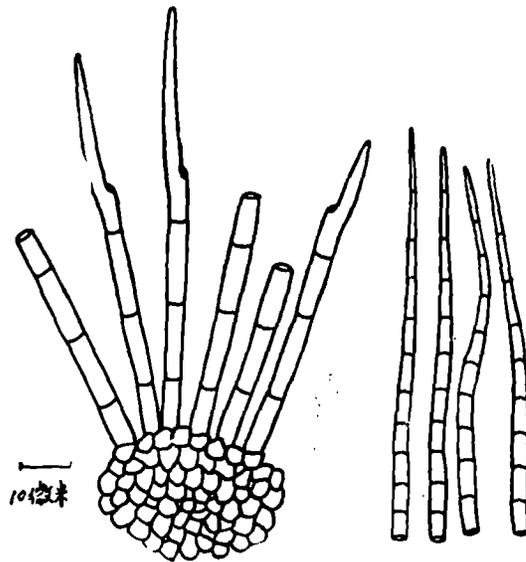


图4 龙利叶尾孢
子座、分生孢子梗及分生孢子

吴茱萸尾孢 新种 图5

Cercospora evodio-ruae S. Q. Chen et P. K. Chi sp. nov. fig. 5

Maculae amphiphyllae, orbiculares vel irregulares, margine atro-brunneae, centro cinereo-
albidae, annulae brunneae, indistinctae; Caespituli amphiphylli; Stroma parvulum, olivaceo-
brunneum, $5\sim 15(8)\mu\text{m}$ in diam.; Conidiophora $3\sim 10(5)$ fasciculata, olivaceo-brunnea,
raro ramosa $3\sim 9(6)$ septata, $0\sim 4$ geniculate, apicem pallide olivaceae, subtruncatae vel co-
nico-truncatae, cicatricibus distinctioribus, $80.3\sim 209.8(124.9)\times 3.3\sim 6.3(5.0)\mu\text{m}$; Cellulae
conidioigenae sympodiales; Conidiae hyalinae, acuciores, raro obclavatae, apicem acutae vel
obtusae, basi truncatae, raro conico-truncatae, $10\sim 28(14)$ septatae, $99.9\sim 199.8(151.9)$
 $\times 2.7\sim 3.3\mu\text{m}$.

Hab. in foliis vivis *Evodia rutaecarpa* (Juss.) Benth. Luoting, Guangdong Province,

x 1987, S. Q. Chen 129 (Typus)

Species similis *Cercospora evodiae* H. & P. Sydow sed a qua differt conidiophoris atratus, non geniculatis, conidis subhyalinis vel pallide olivaceo-brunneis; Species similis *Cercospora evodiicola* Boedijn, sed a qua differt conidis oblatiformis vel cylindricis, basi obovatis, septibus parvis.

病斑叶二面生，圆形至不规则形，边缘黑褐色，中央灰白色，有不清晰的褐色同心轮纹。子实体叶二面生，子座很少，榄褐色，直径5~15(8) μm ；分生孢子梗3~10(5)根簇生，榄褐色，不分枝，偶而分枝，3~9(6)个隔膜，0~4个膝状节，顶端淡榄色，近截形至圆锥截形，孢痕明显，产孢细胞合轴生，83.3~209.8(124.9) \times 3.3~6.3(5.0) μm ；分生孢子无色，针状，极少数倒棍棒状，基部截形。偶而圆锥截形，顶端尖至钝。10~23(14)个隔膜，99.9~199.8(151.9) \times 2.7~3.3 μm 。

寄主：吴茱萸·产地：广东罗定。
1987年10月 陈少勤，129(模式标本)。

本菌不同于 *Cercospora evodiae* H. & P. Sydow 后者分生孢子梗色泽较深，无膝状节，分生孢子近无色至淡榄褐，分隔亦少；也不同于 *C. evodiicola* Boedijn., 后者分生孢子倒棍棒状至圆柱形，基部倒圆锥形，分隔只有3~7个。

穿心莲生尾孢 新种 图6

Cercospora andrographicola S. Q. Chen et P. K. Chi sp. nov. fig. 6

Maculae amphiphyllae, orbiculares, ellipticae, vel irregulares, margine distinctae, nigrae, centro pallidae, inconspicue annulatae, dorsali griseo-viridae, Caespituli amphiphylli; Stroma evolutum, brunneum, 16-57(34) μm in diam.; Conidiophora 4-15(11) fasciculata, olivacea, simplica, 2-10(4) septata, non geniculata, apicem subtruncatae, 149.9-233.0(198.1) \times 3.3-6.7(4.4) μm ; Conidiae hyalinae, acuciores, apicem acutae, basi truncatae, 4-13(9) septatae, 199.9-239.8(205.3) \times 3.3-5.0(3.4) μm .

Hab. in foliis vivis *Andrographis paniculata* (Burm. f.) Nee. Gaoyao, Guangdong Provincia, X 1986, S. Q. Chen 123 (Typus).

Species similis *Cercospora andrographidis* Thirumal. & Govin. sed a quibus differunt conidiophoris non geniculatis, conidiis hyalinis, basi truncatis, stroma evolutum.

叶片上病斑叶二面生，圆形，椭圆形至不规则形，边缘清晰，黑色，中央灰白色，有不明显的同心轮纹，背面灰绿色。子实体叶二面生，子座较发达，褐色，直径16~57(34) μm ；分生孢子梗4~15(11)根簇生，榄色，不分枝，2~10(4)个隔

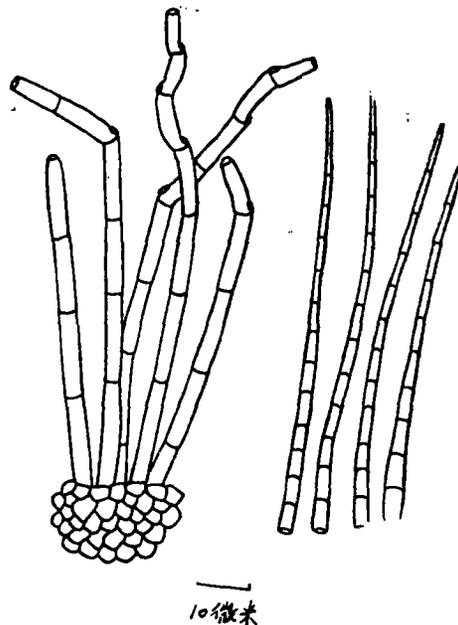


图5 吴茱萸尾孢子座，分生孢子梗及分生孢子

膜,无膝状节,顶端近截形,149.9~233.0(198.1)×3.3~6.7(4.4)μm;分生孢子无色,针状,基部截形,顶端尖,4~13(9)个隔膜,199.9~239.8(205.3)×3.3~5.0(3.4)μm。

寄主:穿心莲。产地:广东高要 1986年10月 陈少勤 123(模式标本)

本菌不同于寄生在一种穿心莲植物(*Andrographis* sp.)上的 *Cercospora andrographidis* Thirumal. & Govin. 分生孢子梗不呈曲膝状,分生孢子基部呈截形,子座较发达。

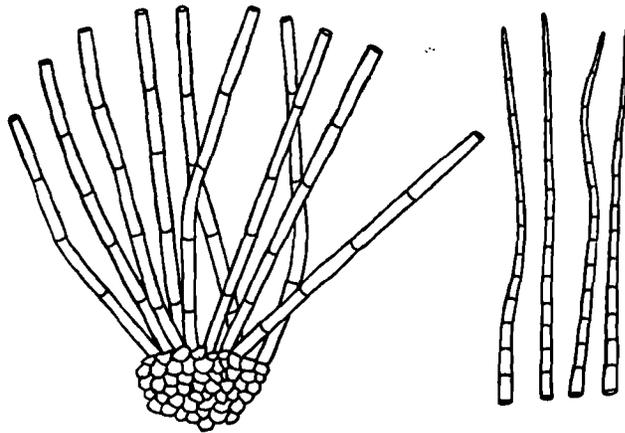


图6 穿心莲生尾孢子座,分生孢子梗及分生孢子

葛尾孢 新种 图7

Cercospora puerario-thomsoni S. Q. Chen et P. K. Chi sp. nov. fig. 7

Maculae orbiculares vel irregulares, margine atro-brunneae, centro cinereo-brunneae; Caespituli amphiphylli; Stroma minutum, olivaceum, 20-27 μm in diam.; Conidiophora 6-15 (8) fasciculata, olivacea, simplicia, erectae, 6-9 septata, non geniculata, apicem subtruncatae, 180-250 (211.4)×5.0 μm; Conidiae acuciores, pallide olivaceae, basi truncatae, apicem acutae, 7-10 septatae, 98.0-133.2 (110.5)×3.3 μm.

Hab. in foliis vivis *Pueraria thomsoni* Benth., Ludong, Guangdong Provincia X 1987, S. Q. Chen 134 (Typus)

Species similis *Cercospora aurinae* Chupp & Viegas sed a qua differt conidiophoris geniculatis, apicibus truncatis, conidiis hyalinis, latioribus; Species similis *C. pueraricola* Yamamoto sed a qua differt conidiophoris cylindricis vel claviformis, ad basin conico-truncatis; Species similis *C. puerariina* sed a qua differt conidiophoris geniculatis, conidiis acicularis vel obclavatis, pallide flavo-olivaceis.

叶片上病斑圆形至不规则形,边缘黑褐色,中央灰褐色,子实体叶二面生,子座小,榄色,直径20~27μm。分生孢子梗6~15(8)根簇生,不分枝,无膝状节,6~9个隔膜,顶端近截形,180~250(211.4)×5.0μm;分生孢子针状,淡榄色,基部截形,顶端尖,7~10个隔膜,98.0~133.2(110.5)×3.3μm。

寄主：葛。产地：广东罗定。1987年10月。陈少勤，134（模式标本）

已报道寄生在葛属（*Pueraria*）植物上的尾孢菌有4个：*Cercospora austrinae* Chupp & Viegas, *C. puerariae* H. & P. Sydow, *C. pueraricola* Yamamoto 及 *C. puerariina* Yen, Deighton (1976) 将 *C. puerariae* 归入假尾孢属 (*Pseudocercospora*)。本菌与 *C. austrinae* 比，后者分生孢子梗膝状曲折，顶端截形，分生孢子无色，宽度大得多，达4~6 μm；与 *C. pueraricola* 比，后者分生孢子圆柱形至倒棍棒状，基部圆锥截形，也不同于 *C. puerariina*，后者分生孢子梗亦膝状曲折，分生孢子针状至细倒棍棒状，淡黄褐色。

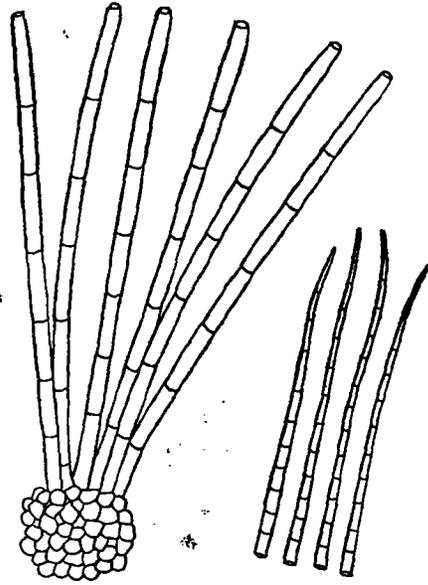


图7 葛尾孢
子座、分生孢子梗及分生孢子

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SOME NEW SPECIES OF *Cercospora* IN CHINA

Chen Shaoqin Chi PeiKun

(Department of Plant Protection)

ABSTRACT

Seven new species of *Cercospora* were collected from Shaoqing Prefecture of Guangdong Province. They were: *Cercospora alpinicola* on *Alpinia oxyphylla*, *C. alpini-katsumadaicola*, *C. alpini-katsumadae* on *Alpinia katsumadai*, *C. sauropi* on *Sauropus spatulifolius*, *C. evodio-rutaecarpae* on *Evodia rutaecarpa*, *C. andrographicola* on *Andrographis paniculata*, and *C. puerariana-thomsoni* on *Pueraria thomsoni*. Detailed descriptions and Latin diagnoses are given for these species.

Type specimens of the new species are deposited in the Department of Plant Protection, South China Agricultural University, Guangzhou, China.

Key Words: *Cercospora alpinicola*; *C. alpini-katsumadaicola*; *C. alpini-katsumadae*; *C. sauropi*; *C. andrographicola*; *C. evodio-rutaecarpae*; *C. pueraria-thomsoni*.