

药用植物上几个尾孢类真菌的新种及新组合*

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摘要 本文报导了 1986 ~ 1993 年间药用植物上尾孢类真菌的 7 个新种及 1 个新组合。新种是: 广东尾孢 (*Cercospora cantonensis* P. K. Chi), 寄生于山药 (*Dioscorea opposita*)、玄参生尾孢 (*C. scrophularicola* P. K. Chi), 寄生于玄参 (*Scrophularia ningpoensis*)、溪黄草尾孢 (*C. ramosiae* P. K. Chi et Z. D. Jiang), 寄生于溪黄草 (*Rabdosia serra*)、佩兰尾孢 (*C. eupatori-fortunei* P. K. Chi et Z. D. Jiang), 寄生于佩兰 (*Eupatorium fortunei*)、泽泻生尾孢 (*C. alismaticola* Z. D. Jiang et P. K. Chi), 寄生于泽泻 (*Alisma plantago-aquatica* var. *orientale*)、姜三七尾孢 (*C. stahlianthi* Z. D. Jiang et P. K. Chi), 寄生于姜三七 (*Stahlianthus involucrat*) 及长春花棒孢 (*Corynespora catharanthicola* Z. D. Jinag et P. K. Chi)、寄生于长春花 (*Catharanthus roseus*); 新组合是使君子假尾孢 (*Pseudocercospora quisqualidis* (Narain & B. S. Mehrotra) Z. D. Jiang et P. K. Chi)。新种均有拉丁文描述。标本存华南农业大学植保系标本室。

关键词 广东尾孢; 玄参生尾孢; 溪黄草尾孢; 佩兰尾孢; 泽泻尾孢; 姜三七尾孢; 长春花棒孢; 使君子假尾孢

中图分类号 Q 949.331.3

1 广东尾孢 新种 图 1

Cercospora cantonensis P.K.Chi sp. nov. fig.1

Maculae orbiculares, ellipticae vel irregulares, centro griseo-albidae, margine brunneae. Caespituli amphigeni, Stomata subglobosa, distincta, olivaceo-brunnea, 33~67 (47) μm diam. Conidiophora 5~18 (12) fasciculata, olivaceo-brunnea, non ramosa, 0~6 geniculata, 3~13 (6) septata, ad sursum non attenuata vel attenuata, ad apicem truncata, cellulae conidiogenae sympodiales, cicatricosa distincta, 90~324 (225) $\mu\text{m} \times 3.3\sim 6.7$ (4) μm , Conidia acicularia, hyalina, plerumque recta, 5~30 (11) septata, ad basin truncata vel subtruncata, ad apicem acutata, 50~266 (116) $\mu\text{m} \times 1.7\sim 3.3$ (2.9) μm .

Ab affinibus distincta maculae distinctae, caespituli amphigeni, stromata conspicua, conidiophora longissima, conidia acicularia, hyalina, longissima, cicatricosa distincta.

Hab. in foliis vivis *Dioscorea opposita* Thunb. Luoding, Provincia Guangdong, VII 1986 leg. S.Q.Chen 341 (Typus).

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叶片上为圆形、椭圆形或不规则形的病斑,边缘褐色,中央灰白色。子实体叶两叶生。子座近球形,榄褐色,显著,直径 $33 \sim 67(47) \mu\text{m}$ 。分生孢子梗 $5 \sim 18(12)$ 根簇生,不分枝,榄褐色, $3 \sim 13(6)$ 分隔, $0 \sim 6$ 个膝状节,上下宽度一致或上部稍窄,顶端截形,着孢痕明显,产孢细胞合轴生, $90 \sim 324(225) \mu\text{m} \times 3.3 \sim 6.7(4) \mu\text{m}$ 。分生孢子鞭形,无色,隔膜很多, $5 \sim 30(11)$ 个,顶端尖,基部截形或近截形,孢痕显著, $50 \sim 266(116) \mu\text{m} \times 1.7 \sim 3.3(2.9) \mu\text{m}$ 。

薯蓣属(*Dioscorea*)上的尾孢菌很多,已报道的有8个,其中7个已被陆续转入*Pseudocercospora*属,本菌病斑清楚,有明显的边缘,子实体叶二面生,子座显著,分生孢子梗和分生孢子都极长,孢痕大而明显,分生孢子呈典型的鞭状,完全不同于*Cercospora pachyderma* H. et P. Sydow, 该菌无明显病斑(Yen 1965, Chupp 1953 CMI 1920 ~ 1992)。

本菌寄生于山药(*Dioscorea opposita* Thunb.)叶片,陈少勤1986年7月采自广东省罗定县,模式标本341号。

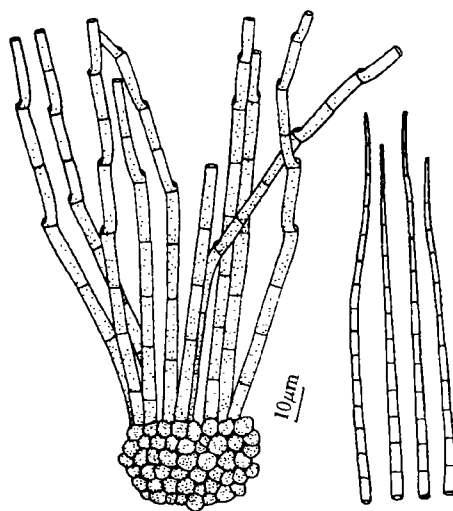


图1 广东尾孢

2 玄参生尾孢 新种 图2

Cercospora scrophularicola P.K.Chi sp. nov. fig.2

Maclae irregulares, cinereae. Caespituli amphigeni. Stromata subglobosa, brunnea. $18 \sim 50 \mu\text{m}$ diam, Conidiophora $7 \sim 24$ fasciculata. olivaceo-brunnea, ad apicem attenuata, pallida, raro ramosa, plerumque $5 \sim 6$ septata, raro 12 septata, $0 \sim 2$ geniculata, $48 \sim 175 \mu\text{m} \times 4 \sim 6 \mu\text{m}$, raro longissima, usque $264 \mu\text{m}$, cellulae conidiogenae sympodiales, cicatricosa distincta, Conidia acicularia, hyalina, $4 \sim 17$ septata, ad apicem acuminata, ad basin subtruncata vel truncata, $46 \sim 134 \mu\text{m} \times 3 \sim 5 \mu\text{m}$, raro longissima, ad $250 \mu\text{m}$.

Species similis *Cercosporae scrophulariae*(Moesz.) Chupp sed a qua differt conidiis cylindricis filiformibus ad apicem obtustis.

Hab. in foliis vivis *Scrophularia ningpoensis* Hemsl. Raoping, Provincia Guangdong, Sinica. III 1989. leg. P. K. Chi 130 (Typus).

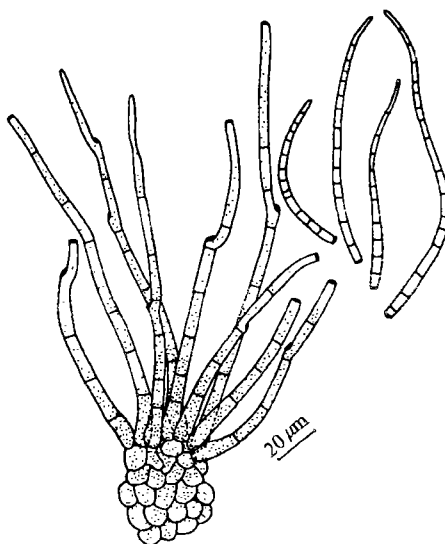


图2 玄参生尾孢

叶片上病斑不规则形,灰色。子实体叶面生。子座近球形,褐色,直径 $18 \sim 50 \mu\text{m}$ 。分生孢子梗 $7 \sim 24$ 根簇生,榄褐色,顶端较窄,色淡,一般 $5 \sim 6$ 个隔膜,多的可达 12 个隔膜, $0 \sim 2$ 个膝状节, $48 \sim 175 \mu\text{m} \times 4 \sim 6 \mu\text{m}$,少数梗极长,可达 $264 \mu\text{m}$,偶尔顶部可分枝,合轴产孢,孢痕明显。分生孢子鞭形,无色, $4 \sim 17$ 个隔膜,顶端稍尖, $46 \sim 134 \mu\text{m} \times 3 \sim 5 \mu\text{m}$,少数孢子极长,可达 $250 \mu\text{m}$ 。

本菌不同于 *Cercospora scrophulariae* (Moesz.) Chupp, 后者孢子圆筒至线形,顶端钝(Chupp 1953)。

寄生于玄参(*Scrophularia ningpoensis* Hemsl.) 叶上,戚佩坤 1989 年 3 月采自广东省饶平县,模式标本 130 号。

3 溪黄草尾孢 新种 图 3

Cercospora radosiae P.K.Chi et Z.D.Jiang, sp. nov. fig. 3

Maculae rotundatae, $2 \sim 5 \text{ mm}$ diam, flavo-brunneae. Caespituli amphigeni. Stromata globosa, minuta, $10 \sim 18 \mu\text{m}$ diam. Conidiophora $3 \sim 15$ fasciculata, recta, non geniculata, olivaceo-brunneae, $2 \sim 11$ septata, ad apicem subhyalina, truncata vel subtruncata, cicatricosa distincta, magna, $60 \sim 275 \mu\text{m} \times 4 \sim 6 \mu\text{m}$. Conidia acicularia, hyalina, multiseptata, ad apicem leviter acutata, ad basin truncata vel subtruncata $38 \sim 77 \mu\text{m} \times 1.7 \sim 3 \mu\text{m}$.

Species similis *Cercosporae labiatarae* Chupp sed a quibus differunt conidiis $1.7 \sim 3 \mu\text{m}$ lata.

Hab. in foliis vivis *Rabdosia serrae* (Maxim.) Hara, Raoping, Provincia Guangdong, Sinica. VII 1988 leg. P.K.Chi 241(Typus).

叶片上病斑圆形,直径 $2 \sim 5 \text{ mm}$,黄褐色。子实体叶两面生。子座近球形,较小,直径 $10 \sim 18 \mu\text{m}$ 。分生孢子梗 $3 \sim 15$ 根簇生,直立,无膝状节,榄褐色, $2 \sim 11$ 个隔膜,顶端色淡,截形或近截形,孢痕大而明显, $60 \sim 275 \mu\text{m} \times 4 \sim 6 \mu\text{m}$ 。分生孢子鞭形,无色,隔膜较多,顶端稍尖,基部截形或近截形, $38 \sim 77 \mu\text{m} \times 1.7 \sim 3 \mu\text{m}$ 。

本菌的分生孢子的宽度比 *Cercospora labiatarum* Chupp 小几乎一倍,仅 $1.7 \sim 3 \mu\text{m}$ (Chupp 1953)。

寄生于溪黄草(*Rabdosia serrae* (Maxim.) Hara) 叶上,戚佩坤 1988 年 7 月采自广东省饶平县,模式标本 241 号。

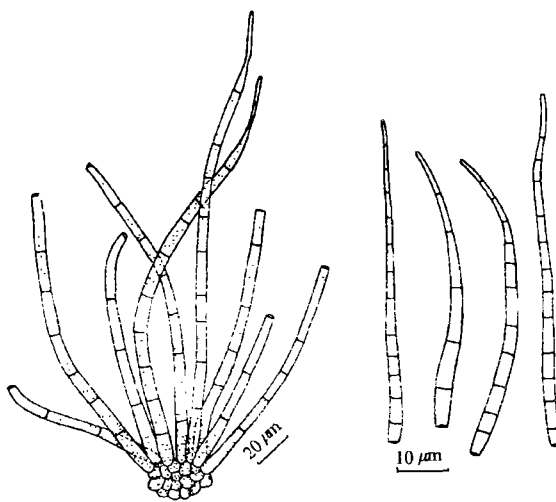


图3 溪黄草尾孢

4 佩兰尾孢 新种 图 4

Cercospora eupatorii-fortunei P.K.Chi et Z.D.Jiang, sp. nov. fig. 4

Maculae subrotundatae, subellipticae, brunneae, 2 ~ 6 mm diam, demum centro griseo-brunneae. Caespituli amphigeni. Stromata fusco-brunnea, 14 ~ 18 μm diam., Conidiophora 3 ~ 26 fasciculata, brunnea ad apicem attenuata, subhyalina, 0 ~ 2 geniculata, plerumque 1-geniculata, subtruncata, 11 ~ 33 μm $\times$ 3 ~ 5 μm , cellulae conidiogemae sympodiales, cicatricosa conspicua; Conidia acicularia, hyalina 4 ~ 13 septata, ad basin truncata vel conico-truncata, ad apicem obtuso-acutata, 50 ~ 73 μm $\times$ 2.8 ~ 4.0 μm .

Ab affinibus distincta conidia acicularia, hyalina.

Hab. in foliis vivis *Eupatorium fortunei* Tuncz. Chaozhou, Provincia Guangdong, Sinica. III 1989 leg. P.K.Chi 262 (Typus).

叶片上病斑近圆形或近椭圆形, 褐色, 直径 2 ~ 6 μm . 后期中央灰褐色。子实体叶两面生。子座暗褐色, 直径 14 ~ 38 μm . 分生孢子梗 3 ~ 26 根簇生, 褐色, 顶端较窄, 色浅, 0 ~ 2 个膝状节, 多为 1 个膝状节, 0 ~ 2 个隔膜, 顶端近截形, 11 ~ 33 μm $\times$ 3 ~ 5 μm ; 产孢细胞合轴生, 孢痕明显。分生孢子鞭形, 无色, 4 ~ 13 个隔膜, 顶端钝尖, 基部截形至圆锥截形, 50 ~ 73 μm $\times$ 2.8 ~ 4 μm .

本菌不同于 *Cercospora aciculina* Chupp, 后期病斑不明显, 分生孢子不呈鞭形, 也不同于 *Eupatorium* 属上的其它各种尾孢菌, 它们的分生孢子均有色 (Chupp, 1953)。

寄生于佩兰 (*Eupatorium fortunei* Tuncz) 叶上, 戚佩坤 1989 年 3 月采自广东省潮州, 模式标本 262 号。

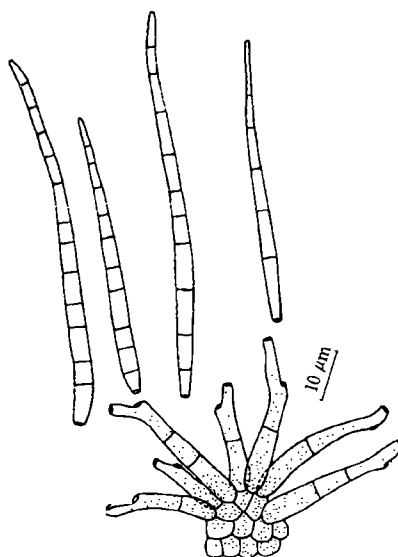


图4 佩兰尾孢

5 泽泻生尾孢 新种 图5

Cercospora alismaticola Z.D.Jiang et P.K.Chi sp. nov. fig.5

Maculae orbiculares, rubro-brunneae, centro griseo-albidae, 2 ~ 5 mm diam.. Caespituli amphigeni. Stromata minuta subglobosa, 13 ~ 41 μm diam.. Conidiophora 3 ~ 20 (8 ~ 9) fasciculata, brunnea, 3 ~ 5 septata, plerumque 2 ~ 8 geniculata, sursum attenuata, subhyalina, subconico vel subtruncata, cellulae conidiogemae sympodiales, cicatricosa distincta, 100 ~ 177 μm $\times$ 4 ~ 6 μm . Conidia acicularia, hyalina, recta vel curvula, multi-septata, ad basin truncata, ad apicem leviter acutata, 79 ~ 153 (120) μm $\times$ 3 ~ 4 (3.2) μm .

Species similis *Cercosporae alismati* Ellis & Halway sed a qua differt conidiis obclavatis, septata indistinctis.

Hab. in foliis vivis *Alisma plantago-aquatica* L. var. orientale Samuels, Guanzhou, sinica. XI 1988 leg. Z.D.Jiang 99 (Typus).

叶片上病斑圆形, 棕褐色, 中央灰白色, 直径 2 ~ 5 mm. 子实体叶两面生。子座为几个

细胞至近球形,直径 $13 \sim 41 \mu\text{m}$ 。分生孢子梗 $3 \sim 20$ 根簇生,一般 $8 \sim 9$ 根簇生,褐色, $3 \sim 5$ 隔膜, $2 \sim 8$ 个膝状节,顶端渐窄、近无色、近圆锥形至近截形,产孢细胞合轴生,孢痕明显, $100 \sim 177 \mu\text{m} \times 4 \sim 6 \mu\text{m}$ 。分生孢子鞭形,无色,直至微弯,隔膜很多,基部截形,顶端稍尖, $79 \sim 153(120) \mu\text{m} \times 3 \sim 4(3.2) \mu\text{m}$ 。

本菌不同于 *Cercospra alismatis* Eil. & Halway, 后者分生孢子倒棍棒形,隔膜不明显 (Chupp 1953)。

寄生于泽泻 (*Alisma plantago-aquatica* L. var. *orientale* Samuels) 叶上,姜子德 1988 年 11 月采自广州,模式标本 99 号。

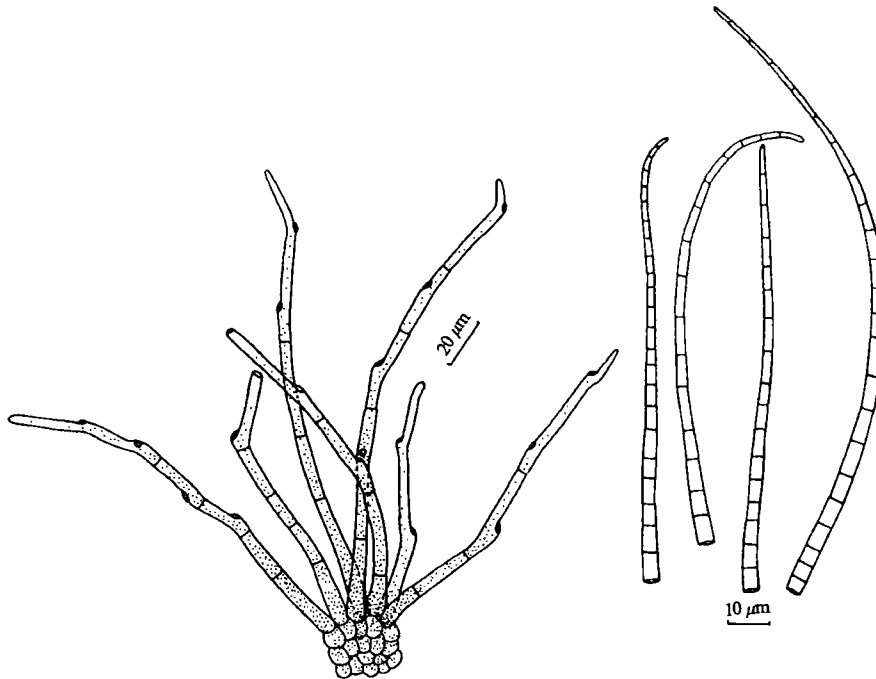


图5 泽泻生尾孢

6 姜三七尾孢 新种 图6

Cercospora stahlianthii Z.D.Jiang et P.K.Chi, sp. nov. fig.6

Maculae viridulae, $2 \sim 5 \text{ mm}$ diam., margine inconspicuae. Caespituli amphigeni. Stromata fusco-brunneae, $22 \sim 72 \mu\text{m}$ diam., Conidiophora $8 \sim 27$ fasciculata, olivaceo-brunnea vel olivaceo-fusca, sursum $0 \sim 3$ geniculata, multiseptata, plerumque $98 \sim 361 \mu\text{m} \times 4 \sim 6 \mu\text{m}$, raro plus quam $400 \mu\text{m}$, cellulae conidiogenae sympodiales, cicatricosa distincta, ad apicem truncata vel subtruncata. Conidia acicularia, subhyalina ad basin subtruncata $3 \sim 19$ septata, $36 \sim 199 \mu\text{m} \times 3 \sim 4 \mu\text{m}$.

Hab. in foliis vivis *Stahlianthus involucrata* (King ex Baker) Craib. Gaoming, Provincia Guangdong, Sinica. IX 1986 leg. Z.D.Jing 303 (Typus).

叶片上为褪绿斑,直径 $2 \sim 5 \text{ mm}$,边缘不明显。子实体叶两面生。子座暗褐色,直径 $22 \sim 72 \mu\text{m}$ 。分生孢子梗 $8 \sim 27$ 根簇生,顶端 $0 \sim 3$ 个膝状节,最顶一段曲折往往较长,橄榄褐色至暗褐色,隔膜多个,一般为 $98 \sim 361 \mu\text{m} \times 4 \sim 6 \mu\text{m}$,有的长可超过 $400 \mu\text{m}$,孢

痕明显,顶端截形或近截形;湿度大时,顶端继续延伸。
分生孢子鞭形,近无色,基部近截形,3~19个分隔。
36~199 μm $\times$ 3~4 μm 。

寄生于姜三七 (*Stahlianthus involucratu*s (King ex Baker) Craib.) 叶片,过去无其他尾孢菌的记载。姜子德 1986年9月来自广东省高明县,模式标本 303号。

7 长春花生棒孢 新种 图7

Corynespora catharanthicola Z.D.Jaing et P.K.Chi,
sp. nov. fig.7

Maculae amphigenae, orbiculares, suborbiculares, fusco-viridae vel griseo-viridae, centro brunneae, concentro-striola indistinctata. Caespituli amphigeni, plerumque hypophylli. Stromata nulla. Conidiophora ex hyphis interioribus oriunda, solitaria vel 2 fasciculata, simplicia vel fortuite rarissime ramosa, brunnea, fusco-brunnea, ad basin tumida, ad apicem, per usque ad 3~10 proliferationes successivas, cylindricas, 78~1350 μm $\times$ 5~8.5 μm . Conidia singula vel bravo-catenulata, cylindrica, brunnea, 4~25 pseudoseptata, ad basin subtruncata, ad apicem obtuso-rotundata, cicatricosa fusco-brunnea, 3~6.5 in diam., 140~310 μm $\times$ 5.5~11 μm 。

Ab affinibus distincta conidia longissima, latitudo parvum, tantum 5.5~11 μm 。

Hab. in foliis vivis *Catharanthus roseus* (L.) G. Don. Guangzhou, Sinica, leg. Z.D. Jiang VI 1993 1036 (Typus)。

叶片上病斑圆形或近圆形,直径可达15mm。暗绿色至灰绿色,中央褐色,常具不清晰的同心轮纹。子实体叶两面生,主要叶背面生,菌丝体内生,不形成子座。分生孢子梗从内生菌丝生出,单生或2根簇生,偶尔极少分枝,褐色,暗褐色,基部膨大,顶端分生孢子脱落后,遗留的孢痕处可产生3~10层出梗,78~1350 μm $\times$ 5~8.5 μm 。分生孢子单生或呈短链,圆柱形,褐色,胞壁厚,4~25个假隔膜,基部近截形,顶端钝圆,基部孢痕暗褐色、直径3~6.5 μm , 140~310 μm $\times$ 5.5~11 μm 。

此菌分生孢子梗很长,偶而分枝,分生孢子窄,宽度仅5.5~11 μm ,比 *C. cassicola* (B.et C.) Wei 的宽度几乎小一倍(Ellis 1971, 1976; 郭英兰, 1984)。

寄生于长春花 (*Catharanthus roseus* (L.) G. Don) 叶上,姜子德 1993年6月采自广州,模式标本 1036号。

8 使君子假尾孢 新组合 图8

Pseudocercospora quisqualidis (Narain & B. S.

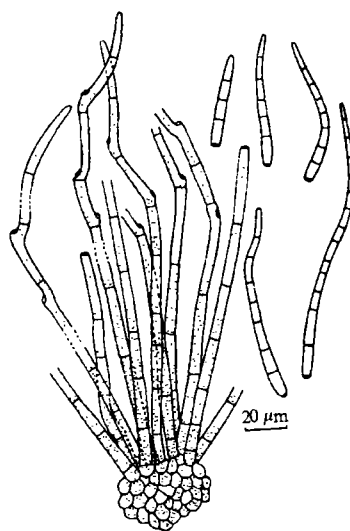


图6 姜三七尾孢

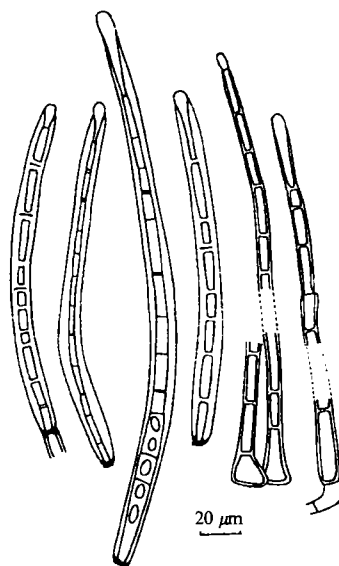


图7 长春花棒孢

Mehrotra) Z.D.Jiang et P.K.Chi, comb. nov. fig.8

Cercospora quisqualidis Naram & B.S. Mehrotra in Sydowia 24:327~328 1970

老、幼叶均可发病,以幼叶为多。叶片上病斑圆形,褐色或红褐色,直径 2~7 mm。边缘界限模糊,叶背面病斑不清或色很浅。子实体叶面生,多具较发达的子座。子座直径 23~53 μm ,褐色,其上密生多根分生孢子梗(多的可达 51 根);仅少数不具子座。分生孢子梗直,简单,偶尔分枝,顶端曲折,淡榄色至榄色,顶部色较淡、颇窄,隔膜少,产孢细胞多苗、合轴式产孢,孢痕小而不明显,直径 1~1.5 μm , 30~90 μm $\times$ 3~5 μm 。分生孢子无色,直或稍弯,倒棍棒形,多为 2~5 个分隔,顶端钝,基部近圆锥形、脐点直径 1~1.5 μm , 28~64 μm $\times$ 3~4 μm 。

本菌分生孢子梗上的孢痕小而明显,分生孢子基部近圆锥形,脐点直径仅 1~1.5 μm ,其特征更符合 *Pseudocercospora* 属的描述,故将其组合为 *Pseudocercospora quisqualidis* (Narain & B.S. Mehrotra) Z.D.Jiang et P.K.Chi, comb. nov.

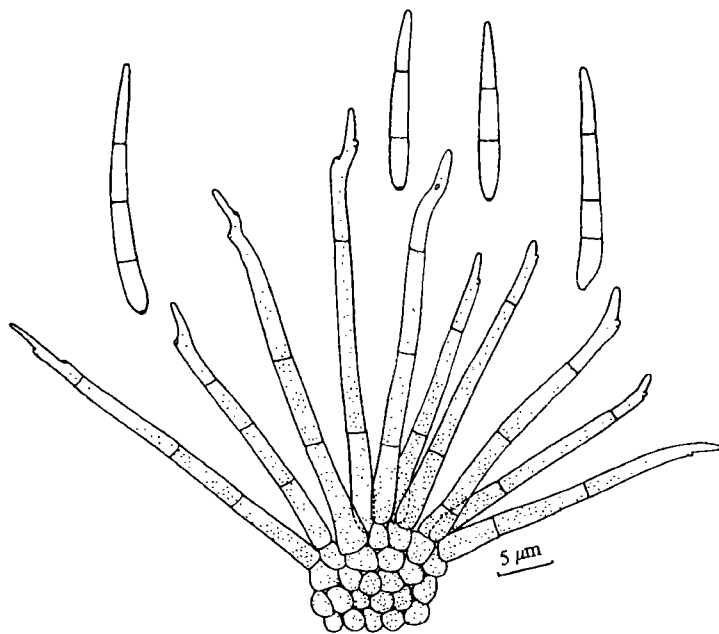


图 8 使君子假尾孢

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DESCRIPTIONS OF NEW SPECIES AND COMBINATION OF *Cercospora* AND ALLIED GENERA ON MEDICINAL PLANT

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Abstract

7 new species and 1 new combination of *Cercospora* and allied genera on medicinal plants in Guangdong Province were reported in this paper. They were *Cercospora cantonensis* P.K. Chi sp. nov. on *Dioscorea opposita*, *C. scrophularicola* P.K. Chi sp. nov. on *Scrophularia ningpoensis*, *C. rabdosiae* P.K. Chi et Z.D. Jiang sp. nov. on *Rabdosia serra*, *C. eupatorii-fortunei* P.K. Chi et Z.D. Jiang sp. nov. on *Eupatorium fortunei*, *C. alismaticola* Z.D. Jiang et P.K. Chi sp. nov. on *Alisma plantago-aquatica* var. *orientale*, *C. stahlianthi* Z.D. Jiang et P.K. Chi sp. nov. on *Stahlianthus involucratus*, *Corynespora catharanthicola* Z.D. Jiang et P.K. Chi sp. nov. on *Catharanthus roseus* and *Pseudocercospora quisqualidis* (Narain & B.S. Mehrotra) Z.D. Jiang et P.K. Chi comb. nov. The detail descriptions and latin diagnoses were given for the new species. The Type specimens of the new species are deposited in the Department of Plant Protection, South China Agricultural University, Guangdong; China.

Key words *Cercospora cantonensis*; *C. scrophularicola*; *C. rabdosiae*; *C. eupatorii-fortunei*; *C. alismaticola*; *C. stahlianthi*; *Corynespora catharanthicola*; *Pseudocercospora quisqualidis*

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