园艺学报 » 2013, Vol. 40 » Issue (12) :2513-2519 DOI:

研究报告

萱草叶枯病菌生物学特性及对药剂敏感性研究

白庆荣, 韩 双, 赵 莹, 李海洋, 梁峻玮, 高 洁

（吉林农业大学农学院，长春 130118）

Biological Characteristics and Fungicide Sensitivity of *Kabatiella microsticta* Causing Daylily Leaf Streak

BAI Qing-Rong, HAN Shuang, ZHAO Ying, LI Hai-Yang, LIANG Jun-Wei, GAO Jie

（Jilin Agricultural University Agronomy, Changchun 130118, China）

摘要 针对中国新发现的萱草叶枯病病原菌Kabatiella microsticta 的生物学特性和对药剂的敏感性进行了研究。结果表明：病菌菌丝生长和产孢适宜温度为25 ~ 30 ℃，最适温度28 ℃；菌丝生长最佳培养基为PDA、PSA 和CA，产孢最佳培养基为V8 汁培养基；D（+）－麦芽糖和L－白氨酸分别为菌丝生长和产孢的最佳碳源和氮源；pH 5 ~ 9 适宜菌丝生长，pH 7 产孢最佳；光照对菌丝生长无影响，但有利于病菌产孢；病菌分生孢子的致死温度为49 ℃，10 min。采用生长速率法测定了病菌对12 种杀菌剂的敏感性：病菌对多菌灵、甲基硫菌灵、戊菌唑、丙环唑、氟硅唑、肟菌 • 戊唑醇、腈菌唑的敏感性较高，其EC50 < 1.0 mg • L^{-1}，EC90 < 5.0 mg • L^{-1}。本研究结果为研究病害发生规律及病害防治提供理论依据。

关键词： 萱草 叶枯病 生物学特性 药剂敏感性

Abstract： The biological characteristics and fungicide sensitivity of Kabatiella microsticta causing daylily leaf streak were studied. The results showed that the suitable temperature for mycelium growth and spore production of the pathogen was from 25 ℃ to 30 ℃, and 28 ℃ was the optimum. The optimal media for mycelium growth were PDA, PSA and CA, but V8 juice was the best for spore production. D（+）-maltobiose and L-leucine were optimal for mycelium growth and spore production. The suitable pH for mycelium growth was 5 to 9, and 7 was optimum for spore production. Light could promote spore production and had no effect on mycelium growth. The lethal temperature of conidia was 49 ℃, 10 min. The sensitivity of K. microsticta to twelve fungicides was detected by mycelium growth rate method. The results showed that the pathogen was more sensitive to carbendazim, thiophanate-methyl, penconazole, propiconazole, flusilazole, trifloxystrobin • tebuconazole, myclobutanil, EC50 < 1.0 mg • L^{-1}, EC90 < 5.0 mg • L^{-1}. This study will lay theoretical foundation for occurrence law and control of the disease.

Keywords： *Hemerocallis*, daylily leaf streak, biological characteristics, laboratory toxicity

引用本文:

白庆荣, 韩 双, 赵 莹等 .萱草叶枯病菌生物学特性及对药剂敏感性研究[J] 园艺学报, 2013,V40(12): 2513-2519

BAI Qing-Rong, HAN Shuang, ZHAO Ying etc .Biological Characteristics and Fungicide Sensitivity of *Kabatiella microsticta* Causing Daylily Leaf Streak[J] ACTA HORTICULTURAE SINICA, 2013,V40(12): 2513-2519

链接本文:

http://www.ahs.ac.cn//CN/ 或 http://www.ahs.ac.cn//CN/Y2013/V40/I12/2513

没有本文参考文献

[1] 黄欣阳, 刘志恒, 杨 红, 亓 烨, 胡积祥, 王世维.辣椒叶斑病的病原菌生物学特性研究[J]. 园艺学报, 2013,40(2): 275-282

[2] 刘志恒, 侯悦, 胡积祥, 滕晓菲, 黄欣阳, 王世维, 赵廷昌.辽宁省甜瓜果腐病病原菌鉴定及生物学特性初探[J]. 园艺学报, 2013,40(1): 89-97

[3] 王 卅, 张 旸, 李玉花.花瓣锥形表皮细胞形成及对授粉昆虫吸引作用机制研究进展[J]. 园艺学报, 2012,39(9): 1781-1792

[4] 陈 忠;李 岩;周乙良;董延龙;杨 龙;黄 莹;沈东升;王洪成;甄灿福.萱草新品种‘炫景’[J]. 园艺学报, 2011,38(8): 1623-1624

[5] 张 勇;李晓军;曲健禄;范 昆;杨建明.我国桃树新病害——叶枯病的病原菌鉴定及生物学特性研究[J]. 园艺学报, 2010,37(11): 1745-1750

[6] 黎海利;董丽.萱草部分野生种和栽培品种亲缘关系的AFLP分析[J]. 园艺学报, 2009,36(8): 1203-1208

[7] 赵树兰;多立安;王礼莉.草坪基质填充废胶粒对践踏前后黑麦草生物学特性的影响[J]. 园艺学报, 2009,36(2): 233-238

[8] 李涛;王飞;田治国;刘洋.6种宿根花卉挥发性物质抑菌效应初报[J]. 园艺学报, 2009,36(12): 1816-1820