

## 不同生境薇甘菊土壤种子库与幼苗库的特征

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Characteristics of the Seed Banks and Seedling Banks of *Mikania micrantha*-Invaded Soils Different in Type of Habitat

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摘要

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摘要 通过野外定点取样与萌发试验相结合的方法, 研究云南德宏州陇川县不同生境薇甘菊入侵地区的土壤种子库与幼苗库的特征。结果表明, 根据土壤种子库萌发后的植物鉴定结果, 橡胶林、林地、灌丛、草地和河岸边这5种生境共统计到40种植物, 隶属18科。不同生境薇甘菊入侵群落的物种组成、种子萌发特性与空间分布及其幼苗库存在明显差异, 橡胶林、林地、灌丛、草地和河岸边的薇甘菊种子密度分别为75、109、165、124和53粒·m<sup>-2</sup>, 且各生境间差异显著 ( $P<0.05$ )。室内萌发试验表明, 薇甘菊土壤种子库萌发时间持续8周, 其中第3~5周的萌发速度最快; 土壤垂直方向上, 0~2、>2~5、>5~10 cm深度土层薇甘菊种子分别占0~10 cm土层种子总数的81%、17%和2%。野外薇甘菊土壤幼苗库萌发时间持续6个月(5—10月), 其中6—8月萌发速度较快。

关键词: 薇甘菊 生物入侵 土壤种子库 幼苗库

Abstract: Characteristics were studied of the seed banks and seedling banks of the five places that are different in habitats but all invaded by *M. micrantha* in Longchuan County, Dehong Prefecture of Yunnan Province, China, using the method of field sampling and germination test in laboratory. Results show that seeds in the soil samples germinated and were identified to be of 40 plant species belonging to 18 families. They differed in species composition, characteristics and spatial distribution of seed germination and seedling bank between habitats. The *M. micrantha* seed density of rubber forest, woodlot, bushland, grassland, and river bank, the five different habitats, was 75, 109, 165, 124, and 53 seed·m<sup>-2</sup>, respectively, showing significant difference between them ( $P<0.05$ ). The in-lab germination experiment shows that germination of *M. micrantha* seeds may last for 8 weeks, and concentrated during the period from the 3<sup>rd</sup> to the 5<sup>th</sup> weeks. Vertically, its seeds were concentrated mainly in the 0-2 cm soil layer, and then in the >2-5 cm layer, and the 5-10 cm layer, accounting for 81%, 17% and 2% of the total seeds in the 0-10 cm soil layer, respectively. In the field, germination of *M. micrantha* seeds may last for 6 months, that is, from May to October, and was concentrated mainly in the period from June to August.

Keywords: *Mikania micrantha* biological invasion soil seed bank seedling bank

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