扁蝸牛之發生及防治

The Occurrence and Control of *Bradybanea similaris* (Férussac)

1. 扁蝸牛成蝸
2. 扁蝸牛生活史
3. 扁蝸牛爲害葉片及莖幹
4. 扁蝸牛爲害果實
5. 塑膠片法
6. 寶特瓶法

1. *B. similaris* adult.
2. The life cycle of *B. similaris*.
3. The infested leaves and stem by *B. similaris*.
4. The infested fruit by *B. similaris*.
5. The PE plate method.
6. The PET method.

1	2
3	4
5	6

扁蝸牛之發生及防治

扁蝸牛分布於臺灣、中國大陸、日本、印度和太平洋諸島，在本省不只爲害葡萄，亦爲害其他多種作物。扁蝸牛在本省中部年發生一代，雨量對於扁蝸牛發生有很大的影響，其族群高峰發生於5~9月。

田間防治一般以聚乙醛粒劑來防治扁蝸牛，但由於藥效時間短、花費多、且容易造成農藥污染問題。爲了克服這些問題，而開發了寶特瓶法來防治扁蝸牛，防治率達94.8%。

寶特瓶法是利用廢棄的寶特瓶，剪斷底部及頸部，再縱向剖開瓶體部，然後將剖開的寶特瓶套入葡萄莖幹，頸部大小與葡萄莖幹粗細配合。爲便於操作，其高度可與人胸部齊高。套上後再將寶特瓶縱開口處下端用釘書針釘牢，若瓶口太鬆可酌以膠布黏合，以免空隙過大。因瓶口套住莖幹密合，扁蝸牛從地面沿莖幹底部往上爬時，通過寶特瓶底部開口，到達寶特瓶頸部即無法通過，全部的扁蝸牛會累積在寶特瓶內呈休眠狀，無法往上爬而達到防治效果。扁蝸牛在日光照射下經過一段時日即陸續死亡，達到防治的目的。

採用寶特瓶阻蝸法時，最好在葡萄剛剪枝後，未長出芽葉前，因爲此期間扁蝸牛密度最低，防治效果最佳，寶特瓶法不但限治效果良好，且係廢物利用，成本低，又無農藥殘留等問題，是一新突破的簡便防治技術，值得推廣予葡萄農使用。

Bradybaena similaris (Férussac) is widely distributed in Taiwan, Mainland China, Japan, India and the islands of the Pacific Ocean. It is the most important pest of grapevine and also occurs on many commercial and ornamental trees in Taiwan.

B. similaris shows a definite univoltinism in central Taiwan. Intermittent rainfall favored the population build-up of this snail. *B. similaris* appeared all year round with the higher population density from May to September.

Grape growers generally apply the metaldehyde granules on the ground for control of *B. similaris*. However, this method has the disadvantages of short effective period, high cost, and residual problems. To overcome these problems, the efficacy of utilizing PET bottles to prevent the snails from climbing up to the grapevine stems was evaluated in this study. Percent control of *B. similaris* after the application of PET bottles was higher than 94.8%.

The bottle traps were made from the disposable PET bottles by cutting off both ends and splitting one side of the body longitudinally to allow sleeving the stem of the grapevine. Then, the bottles were stapled firmly around the stems at the height of 1 meter above the ground.

Since the PET bottle necks were tightly fixed around the grape stem, the snails reaching the mouth of bottle failed to pass through the neck to cause any damage. All of the snails trapped in the bottle became starved and died in a very short period.

The propertime for application of PET bottles is after pruning of grapevine plants when the stems and branches are few and the snaildensity is very low. This method is very effective for control of *B. similaris*, and also has the advantages of low cost and no hazard to the environment. It is a new technique of breakthrough for control of *B. similaris* and usefulfoi recommending to grape growers.

(圖文由章加寶先生提供)