Kudzu: Invasive Species

Kudzu was originally introduced into the United States as an ornamental vine at the Philadelphia Centennial Exposition of 1876. David Fairchild observed extensive use of kudzu as pasturage in Japan. In 1902, he planted seedlings around his Washington, D.C. home to explore their potential in the United States. By 1938, he became disenchanted with kudzu because it “grew all over the bushes and climbed the pines, smothering them with a mass of vegetation which bent them to the ground and became a tangled nuisance. I spent two hundred dollars in the years which followed trying to get rid of it, but when we sold the place there was still some kudzu behind the house….”

**Ecological damage.**

 Few plants can survive once smothered by kudzu. It does not strangle competition, but simply blankets trees with a dense canopy, through which little light can penetrate.

**Geographical Distribution**

Van der Maesen (1985) considered China, Indo-China, Japan, Malaysia, Oceania, and the Indian subcontinent the native range of Kudzu. This variety was successfully introduced to South America and Switzerland, as well as Queensland and New South Wales, Australia. Only in the southeastern United States is kudzu considered a serious pest.

Kudzu rarely occurs in the northeastern United States (Frankel, 1989), but is occasionally found from Connecticut to Illinois. In Illinois, more than 90 infestations have been documented (Wiedenmann, 2001). Kudzu is distributed south as far as Florida, and as far west as eastern Oklahoma and Texas. The most severe infestations occur in the piedmont regions of Mississippi, Alabama, and Georgia.

**Natural Enemies Found**

A systematic survey for kudzu biocontrol agents was initiated in May 1999. The insects that fed on kudzu are still being identified. So far, seven out of 25 species are known to feed on other crops (often beans), and therefore, have been dropped from consideration. Leaf-feeding beetles and sawflies that have no other known hosts have been identified. Two kinds of weevils were found to attack the succulent stems, and eight kinds of large beetles lay eggs and develop as larvae in the main vines or roots.

**Recommendations for Future Work**

For biological control agents from China, no-choice host testing on bean, peanut, and soybean are being initiated in China. Rearing systems need to be developed. In 2001, a wider range of plants common to the United States and China will be tested in China, and a host test list will be submitted to the Technical Advisory Group before United States quarantine tests are planned.

Directions: Answer the following questions in **COMPLETE SENTENCES.**

**Expert Group Analysis**

1. Why is Kudzu considered such a lethal (deadly) invasive species?
2. What possibilities exist for natural biological control of Kudzu?
3. How do you think the Kudzu vine should be controlled?

Jigsaw Group Notes

Notes on Cane Toad:

Notes on Tansy Ragwort:

Discussion Questions:

1. Which invasive species do you think was the most harmful why?
2. How do you think we could increase public awareness of invasive species?