Alien weed in Sarawak: Itchgrass and Giant Paspalum

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*Two alien species of weeds namely itchgrass (*Rottboellia cochincheneensis*) and giant paspalum (*Paspalum sp.*) first reported in Miri and Bintulu, are currently spreading to other divisions in Sarawak. They represent a serious threat to our ecosystem and may affect our agricultural productivity. Education and awareness is very important for the development of suitable management of alien weeds. Therefore, information on the two species are described and provided in this paper.*

Introduction

Today, the infestation of non-native, exotic, alien or new species is happening everywhere. Human, unintentionally, has become the main agent on the dispersal of those alien weeds. They can be brought in as landscape materials, plants to control erosion or even in contaminated seeds used in agriculture or as fodder. Alien weeds can adapt to the local environment very well, reproduce very fast and may suppress the growth of indigenous weeds. Thus, the existence of alien weeds may reduce the diversity or extinct the recent species in the area (Gurevith & Padilla, 2004). The infestation of alien weeds was also reported to reduce the farm production (Thomas & Allison, 1975).

In Sarawak, the occurrence of alien weed species was first discovered in the Northern Region in the early 2000. Since then it was discovered distributed to many places especially along the roadside and farming area (Yazid *et al*., 2011). As alien weeds can damage our ecosystem and, when occurs in farming area may affect our agricultural productivity, it is of our concern to develop a suitable management to control the spread of the weeds. Therefore, this paper attempts to provide information on two species of alien weeds; itchgrass and giant paspalum.

Itchgrass (*Rottboellia cochinchinensis*)

R. cochinchinensis is an erect annual grass that has a height of about 0.8 - 4 meter. The lowest nodes on the branching stems have prop or stilt roots. Leaf sheath has long needle-like hairs, abundant at the top part and became less at its below part. Leaves are simple with a dimension of 15 - 78 cm long and 0.5 - 3 cm wide. The blades are rough to

the touch above and below surface and along the margin but occasionally are smooth below.

The inflorescence is a cylindrical raceme that is 3 - 15 cm long and 2 - 4 mm wide. Individual spikelets are two-flowered, occurring in pairs, the two very different with one sessile and one on a stalk. The sessile spikelet is 1.6 - 2 mm wide and 4.2 - 5.2 mm long and fits into a hollow in the axis of the seedhead. At mature, the seedhead breaks apart at each joint with the pair of spikelets falling attached (Hall & Patterson, 1992).

Photo 1: Itchgrass in sweet corn farm

Photo 2:

Roots with prop type

Needle-like hairs on the leaf sheath

Inflorescence breaks when mature

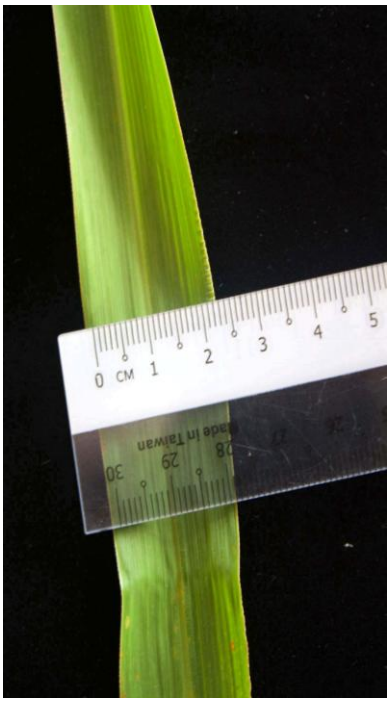
Giant paspalum (*Paspalum sp.*)

This weed is a perennial grass with numerous erect stems of a diameter 6.5 - 10.5 mm. It usually grows as a big clump of about 1.2 – 3.0 meter high. The culm-nodes are glabrous. The leaf sheath is glabrous or hirsute on surface and glabrous on the outer margin. Leaf is simple with an approximate size of 30 - 103 cm long and 15 - 27 mm wide with its surface hirsute.

The inflorescence consists of 8 – 13 recemes and borne along a central axis. One receme is about 5.5 - 16.5 cm long and consist of about 131 - 201 seeds. The central inflorescence axis is about 33 - 51 cm long. When seeds mature and get heavier, the central inflorescence axis will slightly bends.

Photo 3: Giant paspalum in the grazing area

Photo 4:
Stems grow in a big clump



Leaf is about 15 - 25 mm wide

Inflorescence has 8 - 13 racemes

References

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