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Weed brought by goats accompanying IPKF Humans, animals, agriculture and environment affected

Peradeniya special correspondent

The Postgraduate Institute of Agriculture (PGIA) University of Peradeniya at its silver jubilee year, 2000 conducted its second public lecture in the lecture series, one of the activities by an eminent scientist marking the occasion in the PGIA auditorium recently.

The lecture was delivered by Dr. A.W. Magdon Jayasuriya, Head, Plant Genetic Resources Centre of the Department of Agriculture, Peradeniya and members of the Board of Study in Agricultural Biology Faculty of Agriculture University of Peradeniya.

Dr. Jayasuriya, spoke on the subject the Parthenium Weed (*Parthenium hysterophorus*) a noxious and invasive weed species a new plant in Sri Lanka, having been introduced from India with the arrival of the Indian Peace Keeping Force (IPKF) in 1987, apparently with goats brought from India. He said some believe that the initial seed may have arrived as a contaminant in mustard brought to IPKF camps in northern Sri Lanka. The occurrence of the weed in five districts in Sri Lanka, is confirmed. They are Vavuniya (Vavuniya district), Trincomalee (Trincomalee District), Hiripitiya (Kurunegala District), Pallekelle (Kandy District) and Kandaketiya (Badulla District).

The Parthenium weed is an annual herbaceous plant and its invasiveness in Sri Lanka is becoming clearly evident by its rapid spread and efficient reproductive biology. Being essentially an agricultural weed, it is able to disperse into distant places and colonise arable lands and open barren places in the dry and intermediate zones and it can also be an invader in the wet zone in Sri Lanka.

In countries such as Australia and India, the Parthenium weed is one of the worst weeds for agriculture, environment and human and animal health. In India, it causes yield losses of up to 40 per cent in several crops and is reported to reduce forage production by up to 90 percent. In Australia, the parthenium weed is a serious problem in perennial grass-

lands in central Queensland where it can reduce beef production by as much as A\$16.5 million annually.

The plant causes acute allergic dermatitis in humans, which under continuous exposure becomes chronic. Up to 10 per cent of people living in Parthenium areas in India suffer from allergic rhinitis and sinusitis (hayfever) due to its pollen. The parthenium weed is generally unpalatable, but cattle and sheep will eat it when feed is scarce. The acute and chronic toxicities to livestock have been experimentally verified. Symptoms in cattle include dermatitis on the face, ulcerations on muzzle, dental pads, tongue and upper palate. Severe intestinal congestion and degenerative changes in the liver and kidneys were also revealed.

According to Dr. Jayasuriya, intensive manual weeding and burning successive seasons until the weed completely disappears from the landscape in all affected areas is recommended. However, this has to be done cautiously as the weed is known to cause skin and other health problems. Protective clothing should be worn and subsequently washed to prevent the possibility of allergic reaction. To ensure effective control by this methods, plants must be removed before they seed and the whole plant must be pulled out to prevent regeneration from remaining lateral shoots.

In Sri Lanka, the Parthenium weed is in its initial stages of spread and it is believed that the problem could be brought under control if speedy and effective actions are taken. Concerted actions are needed immediately to control, or possibly eradicate, the parthenium weed before its control becomes an enormous task in the future. Workshops with participation of Government policy makers and relevant representatives, scientists appropriate representatives from affected areas including school teachers and study leaders, and funding bodies will helping organising the strategic plans. A Central Parthenium Action Group may coordinate the activities leading to the control of the weed.