



Incursion of Parthenium weed (*Parthenium hysterophorus*) in Papua New Guinea

Parthenium weed, *Parthenium hysterophorus* (Asteraceae), is of subtropical South and North American origin. The weed was found growing at two sites in Papua New Guinea, one in the middle of the main industrial area in Lae City and a second site at Buambub Plantation, 10 km along the Okuk Highway (outside Lae) in the Morobe Province. The weed poses a serious threat, as these outbreak sites are easily accessible by vehicles moving west up the Markham Valley and into the PNG highland provinces.



Parthenium weed, in flower and a young plant (bottom right).

Parthenium is a serious weed in Australia and India and is spreading in Ethiopia. In the Pacific it is present in Vanuatu and New Caledonia. In Australia, Parthenium weed is a declared weed. Parthenium is known to grow and spread over large areas quickly, invading open areas along roadsides, heavily grazed areas and other disturbed sites. Although Parthenium favours alkaline clay loam soils, it can grow well in most types of soil. In PNG it is capable of growing and flowering all year round and therefore poses a serious threat to agricultural production particularly for the cooler highland provinces. Parthenium also causes allergic skin reactions such as dermatitis and hay fever in people who come into contact with the plant.

Parthenium weed is an annual herb with a deep taproot and an upright stem that becomes woody with age. As the plant matures it develops branches at the top half and can reach a height of two metres. Leaves are pale green, deeply lobed and covered by fine smooth hairs. Small creamy-white flowers develop at the tip of all branches. Each flower produces four to five wedge-shaped black seeds about 2mm long and 2mm wide at the base. Plants can flower and set seed within four weeks of germination.

The weed spreads to new areas by seed. The seeds can be transported by water or by people, animals, planting materials from infested areas, vehicles, farm or other equipment contaminated with seeds and/or in mud under shoes or vehicles.

Preventing the spread of Parthenium seed is the recommended containment method. Any outbreaks of Parthenium must be eradicated to prevent further problems to agriculture, the environment and public health.

The National Agriculture Quarantine and Inspection Authority (NAQIA), the National Agricultural Research Institute (NARI) and the SPC Plant Protection Service are collaborating in an urgent eradication programme. While this effort is underway, the public is cautioned to avoid transporting seed from the Lae City area to other areas or provinces or to the outer islands of PNG.

For more information, contact Chief Quarantine Officer (Plants)/Chief Plant Protection Officer, PNG National Agricultural Quarantine and Inspection Authority (NAQIA), Phone (675) 325 9977, Fax: (675) 325 9310, E-mail: naqia@dg.com.pg

Communications of pest and disease incidents of interest to the Pacific region should be sent to: Plant Protection Service, Secretariat of the Pacific Community, Private Mail Bag, Suva, Fiji Islands. Tel: (+679) 3370 733; Fax: (+679) 3386 326; email: nns@snc.int