

Parthenium weed in Maize

Parthenium hysterophorus



Parthenium weed in flower. (Photo by Arne Witt, CABI)



Lower stem leaves are deeply divided and large. (Photo by Arne Witt, CABI)

Prevention	Monitoring	Direct Control	Direct Control	Restrictions
<ul style="list-style-type: none"> Plant certified Maize seed to prevent introduction of weed seeds Avoid grazing animals in affected areas to prevent spread of the weed and poisoning of the animals Use clean machines and clean water source for irrigation to prevent weed seed spread Prevent runoff water from infested land into clean fields by making cutoff drains Maintain a regular weeding regime in crops (general crop sanitation) Grow leguminous cover crops with maize to cover the soil Apply phosphorus as basal dressing and top dress with nitrogen to boost maize health Use properly decomposed manure to avoid introduction of weeds Consider pre-emergence chemical control if there is concern that seed infestation has occurred Rotation with root, tuber and leguminous crops 	<ul style="list-style-type: none"> Annual erect broadleaved herb, 0.5-1.5 m high. Leaves pale green and covered with short stiff hairs. Rosette and lower stem leaves deeply divided and large; upper stem leaves are shorter and less divided. White small compact flower heads (about 5 mm across) at the tips of branches, each flowerhead has 5 distinctive "petals" Parthenium is prevalent in heavily grazed land and arable land under monocropping Regularly check edges of waterbodies and grazing places for rosettes Check for rosettes after periods of rain as seeds depend on high moisture to germinate Check fields for infestation and remove all germinated Parthenium weeds (even if it is one) per acre 	<ul style="list-style-type: none"> Continuous removal of Parthenium weeds using hand gloves, long-sleeved clothed and a mask to avoid contact with skin and respiratory tract since it causes allergic reactions. Deeply bury the weed (up to 60 cm) to prevent future additional weed seeds into the soil and stop seed spread Uproot plants or remove flowering stems before flowering to prevent seed set Avoid removal by burning, mowing, slashing and ploughing as this may promote spread 	<ul style="list-style-type: none"> When using a pesticide or botanical, always wear protective clothing and follow the instructions on the product label, such as such as dosage, timing of application, pre-harvest interval, max number of sprays, restricted re-entry interval. Do not empty into drains and water sources. Use 2, 4- D amine salt post emergence herbicides to control the weed in maize monocrop applied once at 3 - 4 weed leaf stage. If rains continues and more weeds grow then a second application is necessary (2l/ha) which translates to 60 ml of herbicide (2, 4 D 480SL) into 15 litres of water If there is a history of the weed use Acetochlor (Acetochlor 900EC, Sprint 900EC) it is a pre-emergence herbicide. Apply at a rate of 7.5 ml in a 15 litre tank immediately after sowing. 	<ul style="list-style-type: none"> WHO class II (moderately hazardous) WHO class III (slightly hazardous)



Malawi

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AUTHOR(S): David Kamangira, Elisa Mazuma, Rose Mkandawire & Amos Ngwira (Department of Agricultural Research Services)

EDITED BY: Plantwise