



Parthenium Weed in Maize and Sorghum

Parthenium hysterophorus Parthenium

	Prevention	Monitoring	Direct Control	Direct Control	Restrictions
 <p>Parthenium weed in flower. (Photo by Arne Witt, CABI)</p>	<ul style="list-style-type: none"> • Use certified seeds/Clean seeds to reduce the chance of contamination • Practice minimum tillage to minimize weed seeds germination from seed bank • Apply pre-emergence herbicide to prevent germination of weeds (refer to the yellow list) 	<ul style="list-style-type: none"> • Annual erect broadleaved herb, 0.5-2 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" (resembles carrot plant) 	<ul style="list-style-type: none"> • Two hand hoe weeding; two to three weeks and at seven to eight weeks after planting (wear long-sleeved clothes, gloves, mask to avoid direct contact with skin and respiratory tract as Parthenium causes allergic reactions) • Remove entire root system to prevent regrowth 	<ul style="list-style-type: none"> • Use of chemical herbicides may lead to the development of herbicide resistance. 	
 <p>Lower stem leaves are deeply divided and large. (Photo by Arne Witt, CABI)</p>	<ul style="list-style-type: none"> • Avoid movement of animals from infested to non infested areas, clean farm machinery to prevent spread • Weeding of weeds before its sets seeds • Prevent water run-off from infested land to prevent seed introduction to new areas • Maintain a regular weeding regime in the crop (general crop sanitation) 	<ul style="list-style-type: none"> • Regularly check edges of waterbodies, grazing places and vehicle tracks for rosettes • Check for rosettes after periods of rain as seeds depend on high moisture to germinate • Check fields for infestation and consider direct control as soon as you see any plant 	<ul style="list-style-type: none"> • Intercropping with cover crops such as beans/cowpeas as the weed does not tolerate shade • Use natural enemies (biological control); such as <i>Zygogramma bicolorata</i> • Follow post emergence herbicide application (as recommended in yellow list) with hand weeding if required, observing recommended REI (re-entry interval) 	<ul style="list-style-type: none"> • When using a pesticide, always wear protective clothing and follow the instructions on the product label, such as dosage, timing of application, and pre-harvest interval. • Use of pre-emergence herbicides such as Glyphosate or Atrazin 	<ul style="list-style-type: none"> • Glyphosate and Atrazin are in WHO class III (slightly hazardous) Atrazin is persistent in environment
				<ul style="list-style-type: none"> • Use of selective post-emergence herbicide, e.g. 2-4 D, once when weed is at the two to three leaf stage • When using chemicals, always follow the instructions on the label concerning right dosage and right time of application, maximum number of sprays, restricted re-entry interval 	<ul style="list-style-type: none"> • WHO class II (Moderately hazardous) PHI

Tanzania

CREATED/UPDATED: February 2016

AUTHOR(S): Fridah Mgonja (Selian Agricultural Research Institute), Abdul Kudra (Sokoine University)

EDITED BY: Plantwise

