

Weeds in Upland Field



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Striga hermonthica

Common name

USA witchweed

Japan sutoraiga

Type: Annual and parasitic plant

Characteristic:

Stems are erect, branched, 20-50 cm long. Leaves are opposite or alternate. Corolla displays various colors pink, red, yellow.

Striga mainly parasitizes gramineous crops.

Habitat: upland field

Reproduction: seeds

Ecology: It grows well under dry condition.

One plant produces more than 10,000 seeds and seeds have dormancy and a substance, strigol, produced by the parasitic plant is related to dormancy breaking. It is one of the most destructive pathogens in Africa. In fact, it affects 40% of Africa's arable savanna region, resulting in up to \$13 billion lost every year. Striga affects 40 million hectares of crops in sub-Saharan Africa alone.



***Cyperus rotundus* L.**

Common name

USA purple nutsedge

Japan hamasuge

France souchet rond



Type: Perennial sedge

Characteristic:

Red or purplish-brown seed head.

Stems are 15 to 60 cm long.

The plant has a black and hard tuber in soil.



upland field, roadsides,

Reproduction: underground stems and tubers. occasionally seeds..

Ecology: This weed is most serious in dryland fields and highly competitive with crops both moisture and soil nutrients. Tubers have a deep root system and can survive long periods of drought or flooding.

***Fuirena ciliaris* (L.) Roxb.**

Common name

Japan kurotamagayatsuri

Type: Annual herb

Characteristic:

Stems are about 50 cm long.

The tip and upper nodes of the stem bear 3 to 10 spikelets densely.

Spikelets are spindle-shaped and hairy.

Habitat: river banks, pond, grassland, lowland rice field

Reproduction: seed



***Echinochloa colonum* (L.) Link**

Common name

USA jungle rice
Japan wasebie
France ble de dekkon



Type: Annual grass

Characteristic:

Culms are glabrous, branched and creeping at the base, and 20 to 80 cm long. Foliage is soft and purplish in the lower part. Spikelets are 5 to 15 cm long and do not hang down at ripening.



Habitat: upland fields, lowland rice fields

Reproduction: seeds

Ecology: The species are pleiomorphic and display wide variations. A prolific seed producer; has a short life cycles and can complete several life cycles in a year. Young plants resemble rice, which makes hand weeding difficult.

***Dactyloctenium aegyptium* (L.) P. Beauv.**

Common name

USA crowfoot grass,
Egyptian finger grass
Japan tatsunotsume gaya



Type: Annual grass

Characteristic:

Stems are branched, creeping, spread by rooting at the nodes and 15 to 60 cm long. Spikes are terminal and branched, finger like with 2 to 7 rachises.



Habitat: upland field, garden, along roadside

Reproduction: Seeds

Ecology: Seeds are used for native medicine.

***Panicum maximum* Jacq.**

Common name

USA Guinea grass

Japan Giniakibi



Type: Perennial grass

Characteristic:

Culms arise from shortened rhizomes.

They are tussocky and 1 to 2 m long.

Spikes are 15 to 45 cm long. Spikeletes are 3 to 3.5 mm long, composed of 2 florets, which transverse wrinkles on glumes and purplish.

Habitat: upland fields

Reproduction: seeds

Ecology: The plant is cultivated for forage and hay, and sometimes it escapes to become a weed.

***Setaria pallide-fusca* (Schum.) Stapf & Hubb.**

Common name

Japan kotsubukinnenokoro



Type: Annual grass

Characteristic:

Stems are erect and branched at the base and up to 1 m tall.

Panicle are terminal.

Spikelets are pale green and stinging hairs under the spikelets remain purplish dark brown.



Habitat: roadsides, fallow fields, upland fields

Reproduction: Seeds

Ecology: The plant is palatable to livestock and used as good forage.

***Chloris barbata* Sw.**

Common name

USA peacock-plume grass,
swollen finger grass
Japan murasakihigeshiba



Type: Annual grass

Characteristic: The plant is glabrous, erect and 30 to 60 cm long. Panicles are terminal and finger like. Rachis has 2 to 11 branches and purplish red. Flowering and fertile all the year round.

Habitat: along roadsides, upland fields.

Reproduction: seeds

***Rottboellia exaltata* L. f.**

Common name

USA raoul grass, itchgrass
Japan tsunoaiashi



Type: Annual grass

Characteristic:

The plant is 1 to 3 m tall, and stems are large and branched. The plant bears cylindrical panicles and forms about 2,200 seeds per plant.



Habitat: Along roadsides, wastelands, upland fields.

Reproduction: mainly seeds

Ecology: It is a troublesome weed strongly competitive with crops. Hand weeding should be done carefully due to the presence of acute hairs on the leaf sheath.

***Heteropogon contrortus* (L.) P. Beauv.**

Common name

USA tangle-head

Japan taiwanakahigegaya



Type: Perennial grass

Characteristic:

Stems are branched at the base and 20 to 90 cm long.

Spikes are terminal on top of the culm, racemose, 3 to 7 cm long excluding the awn and bristled.



Habitat: upland fields, along roadsides

Reproduction: seeds

Ecology: The species is pleiomorphic.

Culms are used as materials for mat.

***Cynodon dactylon* (L.) Pers.**

Common name

USA bermuda grass,

couch grass

Japan gyoughishiba



Type: Perennial grass

Characteristic: Stems are branched, prostrate and spreading on the ground. Culms are 15 to 40 cm long.

Spikes are terminal and fingerlike.

Rachises have 3 to 7 branches and 3 to 8 cm long.

Habitat: roadsides, grasslands, upland fields, lowland rice field.

Reproduction: seeds

Ecology: It is used as a native medicine for cough and kidney diseases.

Cenchrus echinatus L.

Common name

USA southern sandbur

Japan shinkurinoiga



Type: Annual grass

Characteristic:

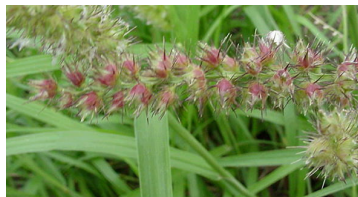
Culms are erect and 25 to 90 cm long.

Spikes are terminal and cylindrical,

5 to 10cm long and composed of

5 to 30 sessile and urceolate involucre.

Involucre are pale green, turning purple with age.



Habitat: upland fields, along roadsides

Reproduction: seeds

Ecology: Frequent hand weeding is necessary for the control.

Commelina diffusa Burm. f.

Common name

USA common spiderwort

Japan shima tsuyukusa



Type: Annual or perennial herb

Characteristic:

Stems are glabrous, smooth, 40 to 100 cm long.

Leaves are linear-oblong and dark green.

The plant display morphological variation in the presence of hairs and shape of leaves.

Inflorescence which arises from the leaf axil bears several flowers.



Habitat: upland fields, levees of lowland rice fields

Reproduction: seeds

***Commelina benghalensis* L.**

Common name

USA dayflower,
bengal spiderwort
Japan maruba tsuyukusa



Type: Annual or perennial herb

Characteristic:

Stems are 40 to 100 cm long, with many branches, prostrate and rooting at the nodes. Flowers are 1.5 to 2 cm in diameter.

There are 3 petals and the upper two are 5 mm in diameter ultramarine colour.

Capsules, about 1 cm long contain 3 to 5 seeds.

Habitat: upland field, levees of wetland rice fields

Reproduction: seeds

Ecology: It is an alternate host of some pathogens and nematodes.

***Ipomoea digitata* L.**

Common name

Japan yatsude asagao



Type: Perennial liana

Characteristic:

Stems are cylindrical, ridged and glabrous.

Leaves are alternate and petioles are 3 to 10 cm long.

Inflorescence appears like a cyme with long stalk at the leaf axil.

Corolla is 5 to 6 cm long and pale red to purple-red.

Habitat: along roadsides, upland fields

Reproduction: seeds

Ecology: Root containing starch are poisonous and used as a medicine

***Abutilon indicum* (L.) Sweet**

Common name

USA country mallow

Japan shima ichibi



Type: Perennial herb

Characteristic:

Stems are erect, branched and 1 to 2 m long.

Leaves are alternate with a long petiole.

Flowers are yellow, solitary and axillary in the upperpart of the stem.



Habitat: along roadsides, wastelands, upland fields

Reproduction: seeds

Ecology: The plant grow well in sunny areas.

***Sphenoclea zeylanica* Gaertn.**

Common name

USA gooseweed

Japan nagabono urushi



Type: Annual herb

Characteristic:

Stems are erect, branched and exude a milky sap from the cut surface.

Long flower stalks arise from the tip of stem or at the node, and bear green and conical inflorescence at the end. Inflorescence is about 7.5 cm long.



Habitat: canals, ponds, lowland rice fields, upland fields

Reproduction: seeds



Ecology: In lowland rice fields, it causes major damage and is one of the important weeds of rice.

Amaranthus spinosus L.

Common name

USA spiny amaranthus

Japan haribiyu



Type: annual herb

Characteristic:

The plant is 40 to 100 cm tall.

Stems are glabrous and reddish.

Inflorescences are terminal, axillary arranged in clusters.

Habitat: upland fields, wastelands, along roadsides

Reproduction: seeds

Ecology: It is an important weed in upland fields.

The plant produces 235,000 seeds per plant.

Cleome viscosa L.

Common name

USA wild caia

Japan kibana himefuchou



Type: Annual herb

Characteristic:

Stems are yellowish brown,

hairy, erect, with many branches and 50 to 120 cm.

Leaves are petiolate and alternate. Solitary flower about 2 cm in diameter appears on a 2 to 5 cm long peduncle arising from the leaf axil of the upper stem.

Fruits are 10 cm long, extending upward and containing a large amount of seeds.

Habitat: upland fields, along roadsides

Reproduction: seeds

Ecology: It produces flowers and fruits throughout the year and often becomes a problem weed.

***Vernonia cinerea* (L.) Less.**

Common name

USA little ironweed

Japan murasaki

mukashiyomogi



Type: Annual herb

Characteristic:

Stems are erect, branched in upper part, 40 to 160 cm long.

Leaves are alternate, spirally arranged and rhombate-ovate to ovate.

Flower head are 7 to 8 mm long and a corymbose panicle bears 20 to 30 flowers.

The heads consist of purple tubular flowers with out ligulate ones.



Habitat: upland fields, along roadsides, fallow fields

Reproduction: seeds

Ecology: Occasionally it becomes a harmful weed in the upland fields.

***Euphobia geniculata* Ortega**

Common name

Japan shoujousou modoki



Type: Annual herb

Characteristic:

Stems are branched dichotomously and become 1 m long.

Internodes at the tip of stem are short and clustered leaves become ornamental leaves with a reddish purple leaf edge or sometimes white leaf blades.

Inflorescences have a short petiole and arranged in clusters at the end of branches.

Fruits are 3 to 5 cm in diameter, with three rigedes.

Habitat: upland fields, along roadsides, levees of lowland rice fields

Reproduction: seeds

Ecology: Foliage is poisonous. It becomes a comparatively harmful weed.

***Euphorbia hirta* L.**

Common name

USA garden spurge,
milk weed
Japan shima nishikisou
France euphorbe poilue



Type: Annual herb

Characteristic:

The plant is prostrate in trampled land and is erect under favourable conditions (60 cm tall).

Whole plant is covered with soft hairs.

Sometimes the upper leaves shows purple mottling.

Inflorescences are axillary and capitate at the end of about 2 cm stalk.

Habitat: along roadsides, gardens, upland fields

Reproduction: seeds

***Eclipta prostrata* L.**

Common name

USA eclipta,
false daisy
Japan takasaburou
France eclipte droite,



Type: Annual herb

Characteristic:

Stems are 20 to 90 cm long.

Leaves are opposite, 3 to 10 cm and 5 to 25 mm wide.

Flowers heads are about 1 cm in diameter.



Habitat: lowland rice fields, marshes, levees

Reproduction: seeds

Achyranthes aspera L.

Common name

USA prickly chafflower,
rattail

Japan murasaki inokozuchi



Type: Annual or perennial herb

Characteristic: Stems are erect or oblique, 50 to 150 cm long with many branches.

Leaves are opposite, thin and hairy on both sides.

Inflorescences appear as spikes with green flowers, they are terminal and up to 40 cm long.

Habitat: wastelands, along roadsides, upland field

Reproduction: seeds

Ecology: Young leaves are edible and used as a diuretic and a ointment.

Boerhavia diffusa L.

Common name

USA creeping spiderling,
red spiderling

Japan beni kasumi,
nahakanokosou



Type: Perennial herb

Characteristic:

Stems are prostrate and 40 to 100 cm long.

Leaves are opposite, with a petiole 0.3 to 1.5 cm long.

Cyme inflorescence is axillary and bears small pink flowers.



Habitat: upland fields, along roadsides,

Reproduction: seeds

***Trianthema portulacastrum* L.**

Common name

USA horse purslane

Japan suberihiyu modoki



Type: Perennial or annual herb

Characteristic:

Stems are branched at the base, 10 to 40 cm long and prostrate.

Leaves are orbicular obovate with a petiole, somewhat fleshy.

Flowers are sessile, solitary on the leaf axil and reddish white.

Habitat: upland field, wasteland, along roadsides

Reproduction: seeds

Ecology: The leaves are rich in calcium, iron and phosphate, they are used as vegetable and medicine.

***Amaranthus gracilis* Desf.**

Common name

USA slender amaranth



Type: Annual herb

Characteristic:

Stems are erect, branched, 10 to 90 cm long.

Petioles are slender with the same length as the leaf blades.

Inflorescences consist of terminal and axillary spikes arranged in dense clusters, about 10 cm long.

Habitat: upland fields, along roadsides,

Reproduction: seeds

Ecology: More than 10,000 seeds per plant are produced. Used as a vegetables.

***Physalis angulata* L.**

Common name

USA wild cape gooseberry

Japan sennari houshiki



Type: Annual herb

Characteristic:

Stems are erect, branched and 20 to 100 cm long.

Leaves are alternate.

Flowers are axillary, inclined downward and solitary.

Sepals are cylindrical, with 5 shallow lobes at the tip.

After flowering, sepals enclose the fruit like a sac.

Habitat: upland fields, along roadsides,

Reproduction: seeds

Ecology: Fruits are edible and used as a medicine in some areas.

***Passiflora foetida* L.**

Common name

USA redfruit

passionflower

Japan kusatokeisou



Type: Annual or perennial
liana

Characteristic:

Stems are hairy and 1.5 to 5 m long.

Leaves are alternate.

Petioles are 1.2 to 5 cm long.

Flowers are axillary, white, purple at the base.

Whole plant emits an offensive odour.



Habitat: upland fields, along roadsides

Reproduction: seeds

Ecology: The plant inhibits the emergence of cogon grass and accordingly it is cultivated as a cover crop in coconut plantation.

Phaseolus lathyroides L.

Common name

USA phasey bean

Japan nanban akabanaazuki

Type: Annual or perennial
herb



Characteristic:

Stems are 1 to 1.5 m long, erect, branched and woody at the base.

Leaves are alternate, ternately palmate compound.

Inflorescence is a 10 to 30 cm long raceme with dark red flowers.

Habitat: upland fields, along roadsides, rainfed rice fields

Reproduction: seeds

Ecology: The plant grows well somewhat wet soil.

Phaseolus atropurpureus Moc. et Sesse ex DC.

Common name

USA siratro

Japan kurobana-
tsuruazuki

Type: Perennial
liana



Characteristic:

Leaves are alternate, ternately palmate with obovate leaflets and rotundate or obtuse at the tips.

Long peduncles, 5 to 25 cm long, arise from axils and bear a raceme with several dark purple and papilionaceous flowers.

Habitat: upland fields, along roadsides

Reproduction: seeds

Ecology: The plant grows in relatively dry areas.

***Tribulus terrestris* L.**

Common name

USA burnnut, caltrop,
puncture weed
Japan hamabishi



Type: Annual herb

Characteristic:

Stems are branched at the base, prostrate and decumbent descendent. Leaves are opposite.



Blades are even-pinnate, composed of 4 to 8 pairs of leaflets. Flowers are solitary at the axil. Fruits are about 1 cm in diameter with 10 sharp spines.

Habitat: near seashore, along roadsides, upland fields

Reproduction: seeds

Ecology: The plant grows well in dry and sunny areas. The sharp spines of fruits cause wounds and puncture of bicycle tires.

***Celosia argentea* L.**

Common name

USA cock's-comb
Japan nogeitou



Type: Annual herb

Characteristic:

Stems are erect, up to 1.5 m long, with longitudinal green line occasionally reddish. Leaves are alternate, lanceolate, acuminate. Inflorescence is terminal and appears like a spike with red florets arranged in clusters.

Habitat: upland fields, along roadsides,

Reproduction: seeds

Ecology: The seeds are used for the treatment of diarrhea.

***Portulaca oleracea* L.**

Common name

USA common purslane,
pig-weed
Japan suberihyu
France comun pourpier



Type: Annual herb

Characteristic:

Stems are branched, often forming a mat, succulent, purplish red and 15 to 30 cm long.

Leaves are alternate or opposite and succulent.

Inflorescence is terminal with densely arranged leaves and composed of 3 to florets.

Perianth consist of 5 petals, yellow and there are 7 to 12 stamens.

Habitat: upland fields

Reproduction: seeds and fragments of stems

Ecology: Occasionally the whole plant is consumed as food and used as feed for swine.

***Mimosa pudica* L.**

Common name

USA sensitive plant
Japan ojigisou
France mimose pudique



Type: Annual herb

Characteristic:

Stems are branched, erect or prostrate, about 1 m long, retrorse spiny and reddish hispids in whole plant.

Leaves have a long petiole and are alternate.

Leaves display a dormant reaction.

Florets bear 4 long stamens and are reddish purple.

Habitat: upland fields, along roadsides,

Reproduction: seeds

Ecology: The plant is spiny, hand weeding is difficult.

Cardiospermum halicacabum L.

Common name

USA balloon vine

Japan fuusenkazura



Type: Annual vine plant

Characteristic:

Stems are 1 to 3 m long, fistulous.

Leaves are alternate and with slender petioles.

Flowers arise from the end of axillary peduncle, are white and small.

Fruits are shaped like a lantern.



Habitat: along roadsides, waste lands, upland fields

Reproduction: seeds

Ecology: Sometimes the plant is cultivated as an ornamental.

Cleome rutidosperma DC.

Common name

Type: Annual herb

Characteristic:

Stems have many branches at the base, with bristles.

They are 20 to 100 cm long.

Flower is solitary on the axillary peduncle which is about 4 cm long and 1.5 cm in diameter.

There are 4 petals bluish purple.

Fruits are cylindrical, 4 to 5 mm in diameter and 5 to 7 cm long and contain many seeds.



Habitat: upland fields, along roadsides

Reproduction: seeds

Ecology: Young leaves are boiled as food and the roots are used as a vermifuge.

***Tridax procumbens* L.**

Common name

Japan kotobukigiku

Type: Perennial herb

Characteristic:

Stems are prostrate on the ground, 20 to 75 cm long, oblique at the, with bristles

and often reddish. Leaves are opposite, ovate to ovate-lanceolate.

Flower heads are terminal on the erect stalk and 1 to 2 cm in diameter, flower stalks are 10 to 30 cm long.

Flowers are white or yellow.

Tubular flowers are yellow.

Habitat: upland fields, along roadsides, forest border,

Reproduction: seeds and rhizomes

Ecology: The plant has strong allelopathy properties.

It is used as feed mixed with grasses.



***Hewittia sublobata* (L. f.) O. ktze.**

Common name

Japan tsurigane hirugao

Type: Perennial herb and vine

Characteristic:

Stems are usually dark purple, with somewhat prostrate hairs, creeping over the soil surface and rooting at the nodes.

Leaves are alternate, hastate with an acute tip, they are cordate at the base, entirely or coarsely dentate but not divided.

Flowers arise from the leaf axile with a stalk 3 to 12 cm long, usually solitary.

Corolla is campanulate, about 5 cm in diameter, pale yellow to white and usually reddish brown in the centre.

Habitat: along roadsides, wasteland, upland fields

Reproduction: seeds

Ecology: Vine is strong and occasionally used as binding wire.



***Euphorbia hypericifolia* L.**

Common name

USA graceful spurge

Type: Annual herb



Characteristic:

Stems are branched at the base and spread out, erect or prostrate and about 50 cm long. Inflorescences are axillary with a small number of cyathia on the 2 to 5 mm stalks.



Fruits are 1.5 to 2.5 mm in diameter, with three ridges and hairs on the back.

Habitat: upland fields, along roadsides

Reproduction: seeds

***Merremia vitifolia* (Burm. f.) Hallier f.**

Common name

Japan budou hirugao

Type: Perennial vine



Characteristic:

Stems are covered with yellowish white bristles, and are lignified at the base, prostrate over the soil or creeping.

Leaves have a long petiole and are opposite.

Corolla is yellow, funnel-shaped and 4 to 6 cm long.

Habitat: grasslands, along roadsides, border of forests

Reproduction: seeds

Ecology: Sometimes it damages slope of road and hedges by forming a cover.

Ageratum conyzoides L.

Common name

USA tropic ageratum

Japan kokkou azami

Type: Annual herb



Characteristic:

Stems are 30 to 120 cm long.

Flowers are terminal, white or pale purple.

Flower heads consist of 60 to 70 tubulous flowers arranged in clusters.

Habitat: upland fields, along roadsides

Reproduction: seeds

Ecology: The plant is toxic to livestock. Leaves are used as medicine for the treatment of cold, malaria, external wounds and skin diseases.

Jatropha gossypifolia L.

Common name

USA cotton-leaved jatropha

Japan akabayatoropa

Type: Perennial herb

Characteristic:

Stems are soft, sticky with glandular hairs and 1 to 2 m long.

Leaves are stipulate at the base of the petioles and often dark purple. Male flowers are about 5 mm in diameter, dark red to purple with 5 petals.

Female flowers are 5 to 7 mm in size and hairy.

Fruits are 1.5 cm long, cylindrical with 3 ridges.

Habitat: wastelands, along roadsides

Reproduction: seeds

Ecology: Seeds are poisonous but used as medicine.

The plant is grown for use as a hedge or in pots as an ornamental.

Oil from the seeds is used for lamps.



***Canna indica* L.**

Common name

USA Indian shot

Japan dandoku

Type: Perennial herb

Characteristic:

Stems are erect and 1.5 to 2.0 m long.

The plant has long succulent rhizomes with white fibrous roots.

Leaves are alternate, thick and lustrous.

One flower stalk arises from the leaf sheath and bears raceme on branched peduncles at the top. Flowers are red.

Habitat: along riversides, wastelands

Reproduction: seeds and rhizomes

Ecology: Rhizomes are edible and used as a material for starch.

Seeds are black and hard, and used for making artifacts such as strings of beads.



***Calotropis gigantea* (Willd.) Dryand. ex W.T. Ait.**

Common name

USA crown flower,

giant Indian milkweed

Japan karotoropisu

Type: Perennial shrub

Characteristic:

Stems are big, erect, branched and 0.5 to 3 m long.

Stems and leaves exude a white milky sap from the cut surface.

Flowers are terminal, lilac and with 5 to 12 cm long.

Habitat: wastelands, along roadsides

Reproduction: seeds.

Ecology: The plant grows on rather dry areas.

Roots are used as medicine



Kyllinga squamulata



Alternanthera sessilis



Indigofera hirsuta



Lactuca taraxacifolia



Spigelia anthelmia L.



Tephrosia purpurium



Achyranthes aspera



Portulaca quadrifida



Mariscus alternifolius



Tapha australis



Talinum triangulare



Pupalia lappacea



Mariscus longibracteatus



Phyllanthus amarus



Boerhavia diffusa



Luffa aegyptiaca

