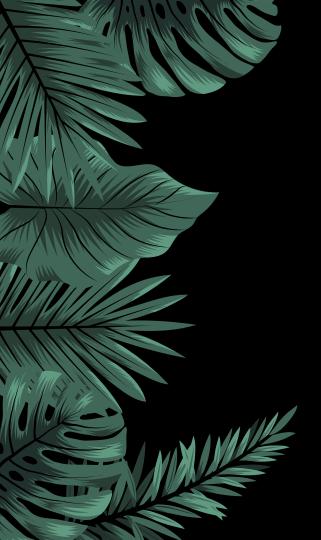
Identifying the Top 10 Weeds in the MI Landscape

By: Emma Beaver, AuD Mathers Environmental Science Services, LLC



Why should we identify weeds?

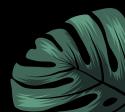
Herbicides

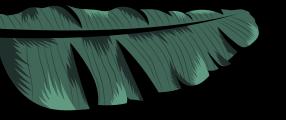




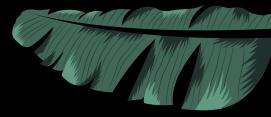
Weed Identification

- Leaves
- Stems
- Flowers
- Seedheads
- Roots
- Growth patterns
- Growth stages





The Top 10 Weeds



- Common Dandelion (*Taraxacum officinale*)
- Canada Thistle (*Cirsium arvense*)
- Field Bindweed (*Convolvulus arvensis*)
- Common Blue Violet (Viola sororia)
- Quackgrass (*Elymus repens*)
- Common Mallow (*Malva neglecta*)
- Common Lambsquarters (*Chenopodium album*)
- Prostrate Spurge (*Euphorbia humistrata*)
- Marestail (*Conyza canadensis*)
- Common Purslane (*Portulaca oleracea*)

Common Dandelion *Taraxacum officinale*



Basal rosette of leaves, yellow flowers on hollow stalks

Taproot





Dandelion Lookalikes



Chicory Similar rosette of leaves but lobes do not always oppose or point towards the base



Common Catsear (False Dandelion) Similar rosette of leaves but densely haired with rounded, shallowly notched lobes



Canada Thistle *Cirsium arvense*

Spiny, lobed leaves surround the smooth stems



flowers surrounded by spineless bracts Rhizomes

Pappus seeds appear densely fluffy

Canada Thistle Lookalikes



Bull Thistle Similar thistle appearance but with spiny winged stems and hairy upper leaf surfaces

Field Bindweed *Convolvulus arvensis*

Egg-shaped to rounded fruit

Viny, climbing or trailing stems

> Arrowhead-shaped leaves Rhizomes

White to pink morning glory-like flowers

Field Bindweed Lookalikes



Hedge Bindweed Larger leaves with pointed apexes and deeply lobed bases, larger flowers with large bracts



Wild Buckwheat Basal leaf lobes point towards the petiole, sheathed stems above leaf bases, clustering flowers





Morning Glory: Seed-propagated, broader, heart-shaped leaves with rounded basal lobes

Common Blue Violet *Viola sororia*



Flowers ranging from white to deep purple, basal crown of heartshaped leaves with rounded teeth

5 petals, lateral 2 bearded, lower petal forms a nectarcontaining spur

Stout rhizomes

3-valved capsule fruits Self-pollinating flowers below the leaves never open



Common Blue Violet Lookalikes



English Violet Stolons, fragrant flowers Field Pansy Leafy, branching stems

Quackgrass *Elymus repens*

Generally grows erect

Very short, membranous ligule

Clasping auricle

Sharp-tipped rhizomes



Quackgrass Lookalikes



Tall Fescue No rhizomes, nonclasping auricles



Annual Ryegrass No rhizomes

Common Mallow *Malva neglecta*



White to whitish lavender flowers, alternate leaves

Taproot

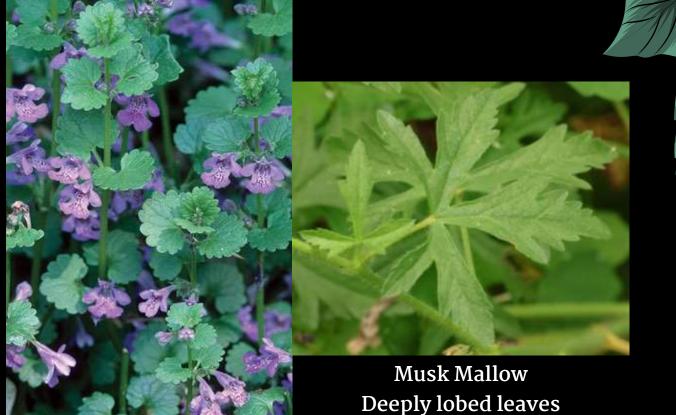




Palmately-veined leaves, sharp, toothed margins

Common Mallow Lookalikes

Ground Ivy Opposite leaves with rounded teeth, square stems, smells like mint



Common Lambsquarters *Chenopodium album*



Grows erect, gray-mealy coating Alternate, irregularly-toothed, rhombic-egg-shaped leaves





Spikes of clustered flowers

Prostrate Spurge *Euphorbia humistrata*



Low-growing, mat-forming, roots at the lower nodes Opposite, oblong leaves, can be spotted

Hairy 3-lobed, 3seeded fruit with 3-sided seeds

Injury produces milky sap

Flower clusters in upper leaf axils

Prostrate Spurge Lookalikes



Spotted Spurge Darker leaves, does not root at nodes, can be considered same species Prostrate Knotweed Similar appearance but injury does not produce milky sap



Nodding Spurge

Ascending or almost erect growth habit, generally larger leaves

Marestail *Conyza canadensis*



Basal rosette seedlings, hairy leaves generally lightly toothed

Erect central stem, alternate, hairy leaves crowded along the stem



Branches of many flowers from main stem form a conical shape

Pappus seeds

Marestail Lookalikes









Virginia Pepperweed Deeply-lobed leaves, peppery taste, fragrant when crushed



Shepherd's-Purse Deeply-lobed leaves

Common Purslane *Portulaca oleracea*



Thick taproot

Low-growing, mat-forming succulent, purplish-red stems

Inconspicuous yellow flowers



Oval, pointed fruit split open transversely

Common Purslane Lookalikes



Spurges Milky sap when injured



Prostrate Knotweed

Not succulent, small, papery sheaths around leaf bases



Methods of Control

- Pre- + post-emergent herbicide combos
- Timing of applications
- · Adjuvants
- Tower 6EC (21 fl oz/ac) + Dimension 2EW (16 fl oz/ac)
- Tower 6EC (21 fl oz/ac) + Pennant Magnum (32 fl oz/ac)



Resources

- Weed Identification Books, Pocketbooks, Etc.
- State Extension Specialist
- Michigan State University Plant & Pest Diagnostics Webpage
- Weed ID Guide App



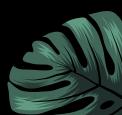


Questions?

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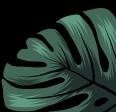
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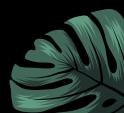
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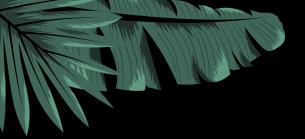
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