Palmer amaranth

*Amaranthus palmeri* L.

**Family:** Amaranthaceae

**Life cycle:** summer annual

**Habitat:** crop fields, disturbed habitats

**General description:** Erect plant reaching heights of 6 ft or greater. Stems and leaves with few or no hairs. Petioles are often longer than the leaf blade. Leaves occasionally have a V-shaped variegation. Like waterhemp, this species is dioecious. The terminal inflorescence can reach lengths of 1 to 2 ft; female plants have very stiff bracts on seed heads that can penetrate skin when grabbed. The bracts are >1/4” in length and the key to differentiating Palmer from waterhemp. The plant is more aggressive that redroot pigweed or waterhemp.

**Key ID traits:** Due to the diversity in both waterhemp and Palmer amaranth it can be difficult to differentiate the two species in vegetative stages. The long, sharp bracts on female flowers are the key trait. Long petioles and dense canopy are two somewhat distinctive vegetative traits.

**Similar species:** Redroot and smooth pigweed, waterhemp and Palmer amaranth are all in the *Amaranthus* genus. The two pigweeds are monoecious, whereas Palmer and waterhemp are dioecious. The pigweeds have hairs on the stems and leaves, whereas the dioecious species generally are glabrous.

**Miscellaneous:** Palmer amaranth is native to the southwest USA, and has been spreading through the cornbelt during the past decade. Palmer amaranth was first documented in Iowa in 2013 and is known to be in five counties. It has caused tremendous problems in cotton producing areas of the southern U.S. after developing resistance to glyphosate and other herbicide classes.

Palmer often has leaves with petioles longer than leaf blade.