

JAPANESE CHAFF FLOWER

[*Achyranthes japonica* (Miq.) Nakai]
ACJA



Fig. 1

UGA 5443694

Native to eastern and southeastern Asia,³ Japanese chaff flower (JCF), was first observed in 1981 on the banks of Tug Fork of the Big Sandy River at Warfield, Marrison County, Kentucky.^{1,3} Since this discovery, it has spread to 9 states.⁴ Although much is not known about this relatively new invader, an effective seed dispersal mechanism^{1,3} and competitive ability to shade-out native floodplain species,¹

are traits that have been observed since its initial discovery.

Habit: Erect,³ perennial herb (Fig. 1);^{2,5} to 15 dm (~5 ft).²

Reproduction: By seed; animal and water dispersed.

Leaves: Simple, opposite, elliptic; apex acute or acuminate and margins entire^{2,3} (Figs. 2 & 3); pinnately to arcuately veined, pubescent.^{1,2,3}

Stems: Initially single stemmed, but older plants tend to have multiple stems arising from a single root crown; red base; pubescent;¹ 4-angled;³ can become decumbent late in the season;³ dead, orange-colored stems remain erect



Fig. 2

UGA 5427471



Fig. 3

UGA 5427353

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Fig. 4

UGA 5427352

through fall and winter.¹

Flowers: Late summer through early fall;¹ occur on erect spikes at end of stems and upper branches; small, lacking petals, and tightly clustered at end of spike;¹ diverge at nearly right-angles from spike¹ (Figs. 2 & 3).

Fruits/Seeds: slender, dry, with a single hard seed head;¹ spikes elongate as fruit forms and fruits lie flat against spike (deflexed), to 2 dm (~8 in)^{1,2} (Fig. 4); each fruit contains a pair of stiff spiny bracts that aid in seed dispersal.¹

Habitat: Densely shaded moist soils to sunny drier areas;¹ wooded, annually flooded riverbanks,^{1,2,3} edges of fields, ditches, and swales.¹

Similar Species: Pigweed species like (*Amaranthus retroflexus* L.)⁵(PW) (Fig. 5), have reddish stem bases like JCF and similar flowers. However, all PW is alternately branched, not opposite like JCF.^{1,2} American lopseed (*Phryma leptostachya* L.)⁵ (AL) fruits are similar to the elongated JCF fruit,^{1,3} however, JCF fruit contains paired spiny bracts, are more dense along the stem, and are deflexed.¹ In addition, AL leaf margins are toothed, not smooth or toothless like JCF.



Fig. 5

UGA 5396512



Fig. 6

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***Achyranthes japonica* (Japanese chaff flower)**

Text Citations:

1. Evans, C. and D. D. Taylor. 2011. Japanese Chaff Flower -- *Achyranthes japonica*. Wildland Weeds. pp. 4-6.
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4. University of Georgia Center for Ecosystem Health. 2012. Early Detection & Distribution Mapping System (EDDMapS) (<http://www.eddmaps.org/>, 14 May 2012).
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