

**Vascular Plants of Williamson County**  
*Rapistrum rugosum* – BASTARD-CABBAGE [Brassicaceae]

*Rapistrum rugosum* (L.) All., BASTARD-CABBAGE. Annual, taprooted, rosetted, 1–several-stemmed at base, with ascending flowering branches, ascending to erect, in range 30–80 cm tall; shoots with basal leaves and cauline leaves, short-hirsute or sparsely so, the hairs unbranched and with swollen bases. **Stems:** ± cylindrical, to 8 mm diameter, developing periderm, hairs downward-pointing, increasing density upward. **Leaves:** helically alternate, deeply pinnately lobed (lyrate; basal and lower cauline leaves) and mostly unlobed (upper cauline leaves), petiolate, to 350 × 85 mm, the largest leaf at several nodes above shoot base and then decreasing upward, without stipules; petiole of basal leaves cylindrical, to 100 mm long, tough, 2-ridged with blade lobes arising on ridges; blade of basal and lower cauline leaves oblong to oblanceolate, deeply lyrate or not, terminal lobe the largest, lateral lobes generally alternate (never paired), obovate, and widely spaced with jagged blade margins along sinuses, low crenate-dentate and wavy on margins, pinnately veined with veins raised on lower surface, sparsely hairy, the hairs erect or upward-pointing, evenly distributed; blade of upper cauline leaves lanceolate to obovate, decreasing to 10 mm long, low crenate-dentate to subentire and ± wavy on margins, typically obtuse at tip, lateral lobes mostly absent, pinnately veined with midrib raised on lower surface. **Inflorescence:** raceme, terminal, many-flowered, congested and ± flat-topped at tip with open flowers overtopping buds, glabrous or rachis glabrate; bract subtending raceme leaflike, petiolate, sparsely short-hirsute; rachis cylindrical, aging somewhat glaucous; bractlets absent; pedicel ascending, at anthesis 2.5–3 mm long increasing to 4 mm long in fruit and loosely appressed, glabrous. **Flower:** bisexual, radial, 7–9 mm across; **sepals** 4, ± erect, dimorphic, oblong, mostly 3–3.5 × 0.8–1.5 mm, green, outer pair broader than inner pair, with narrowly membranous margins and outer sepals with colorless tips, deciduous; **petals** 4, clawed, 6–7.5 × 1.6–2 mm; claw erect, linear, ca. 3.5 mm long, with raised, yellowish midvein and colorless, winglike margins; limb spreading, obovate, bright yellow, pinnately veined; **stamens** 6, in 2 whorls, dimorphic with outer 2 short and inner 4 longer and slightly exserted; filaments erect, 2–2.5 mm long (short stamens) and 3–3.5 mm long (long stamens), greenish to yellowish; anthers dorsifixed, dithecal, ± 1.2 mm long, light yellow, arrow-shaped at base, longitudinally dehiscent; pollen light yellow; **nectaries** 4 and continuous (confluent), opposite sepals and alternate with long filaments, 2 ovoid and 2 oblong with depressed center, 0.3–0.4 mm wide, dark green; **pistil** 1, ca. 3.5 mm long; ovary superior, oblanceoloid, 1.5–2 mm long, straight, light yellowish green, often with faint line at junction of upper and lower sections, glabrous, 2-chambered, each chamber with 2 ovules; style at anthesis 1–1.5 mm long, developing into beak; stigma capitate and hemispheric, conspicuously 2-lobed, greenish, level with base of anthers of long stamens, the divide between lobes ⊥ septum. **Fruit:** siliqua (silicle), schizocarpic, splitting transversely into 2 unequal, 1-seeded segments, the upper segment indehiscent, the lower segment indehiscent with 2 valves weakly fused, falsely 1-chambered, siliqua overall clublike, 7.5–8 mm long including a persistent, fingerlike beak 1.5–2 mm long, on an appressed pedicel to 4 mm long; upper segment subspheroid with ca. 13 vertical ribs, 2.2–3.3 mm, thick-walled with papery cover becoming dry and extremely hard (indurate); lower segment inversely conic-

cylindric,  $2-2.5 \times 1-1.6$  mm, truncate at top, when immature appearing like a stalk (resembling a gynophore) but containing a seed and with valve outlines clearly visible, persistent on pedicel, relatively thin-walled. **Seed:** of lower segment, ellipsoid compressed front-to-back, ca.  $1.5 \times 0.8$  mm, dull reddish brown; seed coat often wrinkled; mucilaginous when wetted.

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