

*Ancistrocarphus filagineus* A. Gray, HOOKED GROUNDSTAR, WOOLLY FISHHOOKS. Annual, fine-taprooted, not rosetted, (1–)several-stemmed at base, initially ascending later decumbent to  $\pm$  prostrate, in range to 3 cm tall; monoecious; shoots grayish, slender-stemmed with several short-lived basal leaves and numerous cauline leaves, densely white-woolly with long, appressed, upward-pointing fine hairs. **Stems:** cylindric,  $< 0.5$  mm diameter, purplish red, with short internodes,  $\pm$  hidden by appressed woolly hairs. **Leaves:** helically alternate but opposite at first node above cotyledons (fused across node), simple, sessile to inconspicuously petiolate (basal leaves), without stipules; blade linear to linear-oblongate,  $1.5\text{--}7 \times 0.6\text{--}1.6$  mm, long-tapered at base, entire and often folded upward from midline, obtuse with minute blunt point at tip, obscurely 1-veined. **Inflorescence:** heads solitary and terminal or in terminal, condensed, cymelike arrays having  $2\text{--}5 \pm$  sessile heads, head disciform, spheric to ovoid,  $2.5\text{--}5 \times 1.7\text{--}2.5$  mm increasing in fruit, with  $5\text{--}7$  pistillate peripheral flowers and  $2\text{--}3$  staminate central flowers, sometimes the lateral heads flattened against side of central head, lacking bisexual flowers; **involucre** absent or reduced to 1 or 2 phyllaries, phyllaries ovate to obovate,  $\pm 1.5 \times 1$  mm, scarious, acute at tip, glabrous; receptacle cylindric,  $\pm 1.2 \times 0.3$  mm, slightly flared at base and just below staminate central flowers, with bractlets (paleae) subtending pistillate flowers and 5 paleae in a whorl surrounding staminate flowers, palea enclosing pistillate flower erect or spreading, arched-ovoid,  $\pm 1.5 \times 1$  mm, flattened bottom-to-bottom, densely woolly, with an expanded and ovate tip,  $0.8\text{--}1 \times 0.5\text{--}0.8$  mm, scarious, with a short green midvein aging brownish, staminate palea erect, lanceolate,  $2.3\text{--}2.6 \times 0.6$  mm, long-tapered and inwardly hooked at tip, mostly green but golden tan at tip, woolly on outer surface. **Peripheral flower:** pistillate, radial, 0.1 mm across at orifice; **calyx (pappus)** absent; **corolla** minutely 2–3-lobed (if 2-lobed then one lobe narrow and other lobe broad, 2-toothed),  $\pm 1$  mm long; **stamens** absent; **pistil** 1,  $\pm 2$  mm long; ovary inferior, oblongoid to ellipsoid,  $\pm 0.7 \times 0.3$  mm, 1-chambered with 1 ovule; style 1.1–1.5 mm long, 2-branched; stigma lobes exerted,  $\pm 0.3$  mm long. **Central flower:** staminate, radial, 0.2 mm across; **calyx (pappus)** absent; **corolla** 5-lobed, 1 mm long; tube-throat tapered-cylindric, light greenish yellow; lobes rounded, 0.15 mm long, reddish at base, light yellow marginally; **stamens** 5, fused to corolla at base of throat; filaments short, white; anthers fused into cylinder surrounding style, basifixed, dithecal, 0.5 mm long, yellow, with a terminal appendage, longitudinally dehiscent; pollen yellow; **pistil** 1, sterile; ovary inferior, vestigial; style 1.1 mm long, slightly exerted, unbranched. **Fruit:** cypselae, lacking pappus, abscising with hooked palea, obovoid,  $1.4\text{--}2 \times 0.6\text{--}0.9$  mm, dull brown with 1 black band near base, slightly curved, smooth, glabrous. Early April–early May.

Native. Annual known from several sites in the central SMM appearing on bare soil along trails, but likely present elsewhere where this species is not recognized. *Ancistrocarphus filagineus* is a tiny woolly annual that appears to be very localized, even though the fruit is released with the palea, which has a minute hook and therefore a potential dispersal mechanism. This is the only species in range of the woolly genera of Asteraceae having hooked paleae, hence the common name, and also there are no bisexual central flowers.  
B. A. Prigge & A. C. Gibson