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First detection of numerical variations in aggenital setae of female *Eustigmaeus segnis* (Koch) (Acariformes: Stigmaeidae)*

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Eustigmaeus segnis (Koch, 1836) (Stigmaeidae) (Fig. 1) has a widespread distribution and was recorded from many countries including Turkey (Fan *et al*. 2016; Doğan *et al*. 2018a; Doğan 2019). This species can be recognized by having dorsal dimples in uniform size, dorsal body setae long, falciform with marginal spinules, dorsal setae c_1 widely spaced in both sexes, metasternal shield fused with (Fig. 2A) or partly separated from endopodal shields (Fig. 2B) in female and a pair of aggenital setae in both sexes (Doğan 2005; Bayrak *et al*. 2019).

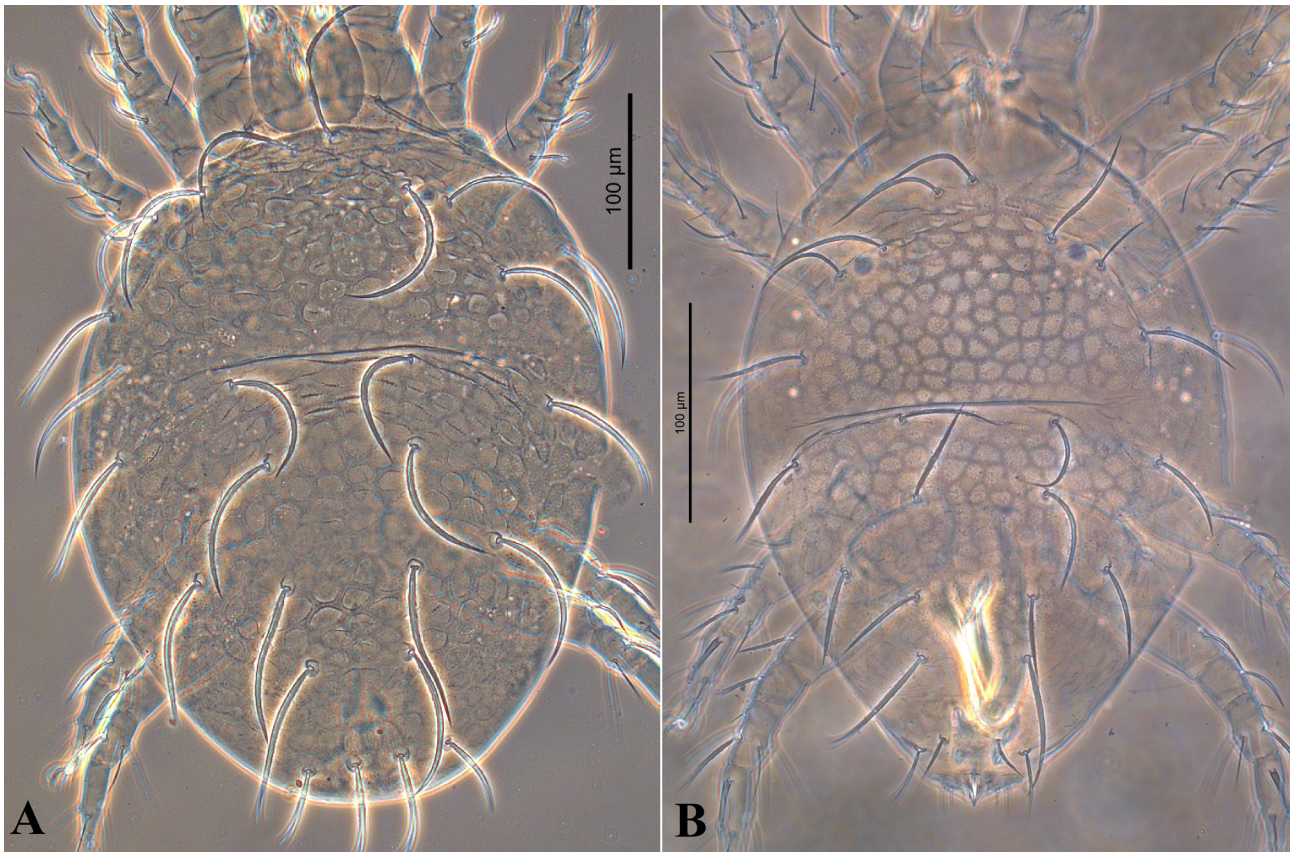

FIGURE 1. *Eustigmaeus segnis*—A) Female, dorsal view, B) Male, dorsal view.

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In the present work, 73 female and 2 male specimens of *E. segnis* were examined to determine their morphological variations. Asymmetric variations in the number of aggenital setae of 2 examined specimens were detected. The specimens were extracted from litter under oak and juniper by using Berlese-Tullgren funnels during an on-going study (Project № 121Z986) on mite biodiversity of Karasu Valley within the borders of the province of Erzincan (Turkey), cleared in 60% lactic acid and mounted in Hoyer's medium on microscopic slides. The morphological variations were photographed with the aid a Leica DM 4000B phase-contrast light microscope.

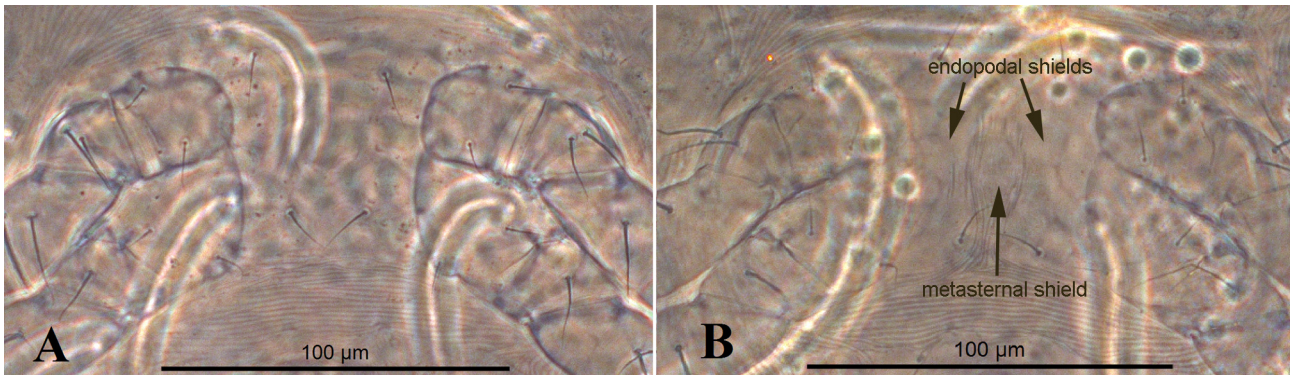

FIGURE 2. *Eustigmaeus segnis* (female)—Metasternal shield. A) Fused, B) Partly separated.

Eustigmaeus segnis normally has a pair of aggenital setae (ag_1); however, in an examined female specimen, left aggenital region bears an extra seta (Fig. 3A), while the other female specimen lacks the left seta ag_1 (Fig. 3B). In this species, structural variations on the intercoxal area, some dorsal setae in different forms and asymmetric variations in the number of setae on the leg genua, coxa and subcapitulum have been stated by Bingül *et al*. (2017) and Doğan *et al*. (2018b). Numerical variations in aggenital setae of female *E. segnis* are reported for the first time in this study.

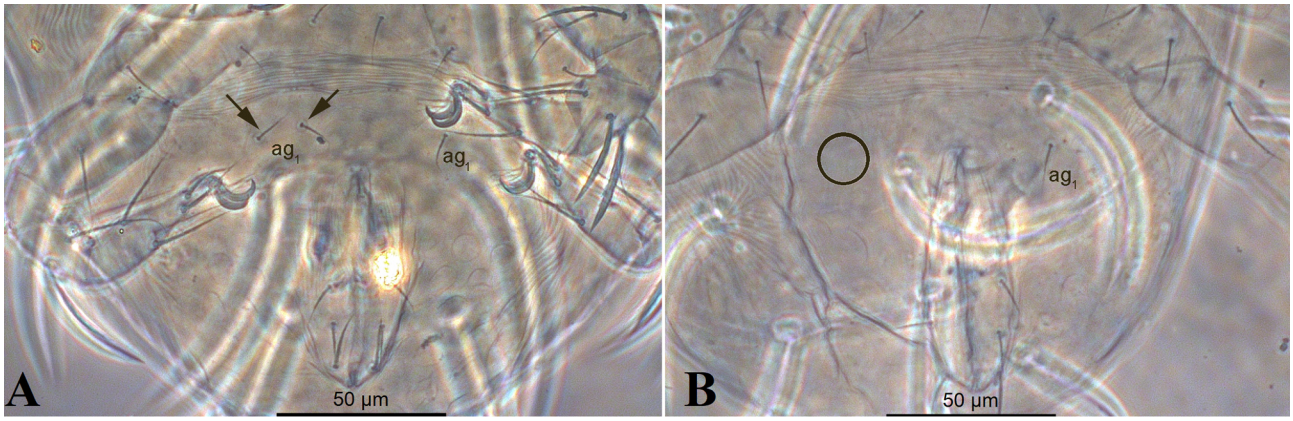

FIGURE 3. *Eustigmaeus segnis* (female)—Variations in aggenital setae. A) Left aggenital region with an extra seta, B) Lacking of left seta ag_1.

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Keywords: Abnormality, asymmetry, mite, morphology, setae

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