

Centaurea derderiifolia Wagenitz., *Centaurea drabifolia* Sm. subsp. *floccosa* (Boiss.) Wagenitz & Greuter and *Centaurea kotschy* (Boiss. & Heldr.) Hayek var. *floccosa* (Boiss.) Wagenitz, which are endemic taxa from Turkey belonging to *Centaurea* sect. *Cheirolepis*, were subjected to morphological, karyological and palynological investigations. The somatic chromosome numbers, pollen morphology and detailed morphometric properties were examined. The somatic chromosome numbers were determined as $2n = 2x = 36$ in *C. derderiifolia*, *C. kotschy* var. *floccosa*, and *C. drabifolia* subsp. *floccosa*. Karyotype analysis indicated that chromosomes of these *Centaurea* taxa generally have median region (m), submedian region (sm) and rarely median point (M) karyotypes. The pollen morphology of these endemic taxa of the genus *Centaurea* was investigated by light and scanning electron microscopy. The pollen grains of the examined species are mainly isopolar and radially symmetric, subprolate, tricolporate. Tectum ornamentation is scabrate and scabrate-perforate, amb triangular. The pollen grains of all taxa studied are 3-zonocolporate. The colpus is usually long, acute at ends and with smooth membrane. Pollen grains belonging to *Cheirolepis* section reveal homogeneity in their characters.

