

Those kinds of capitate glandular trichomes of *S. argentea* observed here (capitate type I, II, III) corresponded to three types of capitate trichomes described by Werker et al. (1985a) in their study of some Lamiaceae species including *Salvia*. Serrato-Valenti et al. (1997) observed two types of capitate glandular trichomes in *S. aurea*, which occurred in *S. argentea* as type I and III. In *Nepeta racemosa* L. (Bourett et al. 1994) and *S. aurea* (Serrato-Valenti et al. 1997), small capitate glands with two head cells were found. In the peltate trichomes of *Salvia argentea*, the secretory product remained trapped between the cuticular sheath and the head cells, following a pattern already described for other aromatic Lamiaceae (Bosabalidis & Tsekos 1982; Werker et al. 1985a,b; Bruni & Modenesi 1983; Bourett et al. 1994). From a functional point of view, Werker (1993) classified the glandular hairs into two types, according to different mode and timing of secretion; a) short-term glandular trichomes, which start and end secretion rapidly; b) long-term glandular trichomes, in which secretory material is accumulated in a large subcuticular space. The rupture of the cuticular sheath is likely, in accordance with Ascensao et al. (1995), who stated that external factors such as high temperatures, low air humidity or animal aggression may cause the cuticular rupture. Another less common mechanism of release has been observed in peltate trichomes of *Salvia argentea*, as the droplets of secretory material were observed on the external surface of the head, which appeared to pass through the cuticular layer. Some Lamiaceae secretion from capitate trichomes contains mostly polysaccharides and only small quantities of essential oil. Furthermore, Werker et al. (1985b) reported that the different morphological structure of some capitate trichomes might correspond to the production of the different materials. In our study, the capitate trichomes with a bicellular head had a 1–3 celled stalk or no stalk cell, while bicellular headed capitate trichomes in *S. sclarea* (Ozdemir & Senel (1999, 2001) are the first authors to report the base cell number of capitate glandular trichomes in the *Salvia*. The capitate trichomes of *S. argentea* had 1–7 celled base, while they had 1–2 celled base in *S. sclarea* and *S. forskahlei* (Ozdemir & Senel 1999, 2001). On the other hand, the peltate trichomes are considered the site of production and storage of essential oil (Bini Maleci et al. 1983; Werker et al. 1985a), Senel 1999) had no stalk cell and those in *S. forskahlei* (Ozdemir & Senel ? In the present study, we also determined the base cell number of capitate glandular trichomes of *S. argentea*. The morphology of glandular hairs is often related to the kind of secreted product. Ozdemir & S ?