

4-YEARS OBSERVATIONS ABOUT THE MAJOR BIO-AGRONOMICAL AND QUALITATIVE TRAITS IN CLARY SAGE (*Salvia sclarea* L.).

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Clary sage (*Salvia sclarea* L.) is a xerophyte biennial plant belonging to the family *Lamiaceae*, spontaneous in the European Mediterranean basin and widely cultivated all over the world. The inflorescences have a very strong aromatic scent and the essential oil, characterized by a fresh floral and herbaceous odour, has an economic value for flavour and fragrance industries.

In a previous work (Carrubba et al, 2002), a Clary sage biotype spontaneous in the Mediterranean semi-arid environments was characterized both from the morphological and from the chemical point of view, and its suitability to the field conditions was stated. This work summarizes the results of a 4-year trial period (1998 to 2002) performed in rainfed conditions in Sparacia (Cammarata- AG – Sicily; 37° 38' N; 13° 46' E), in which the same biotype was grown consecutively. The seeds were sown in a trial plot on December 4th 1998, and during the following four years the major biometrical and productive parameters were measured: height and weight of plants, time of flowering, leaf area, seeds yield. After flowering time the essential oils obtained both from leaves and inflorescences were analysed separately by GC-MS. The trial was repeated in the following two years, performing new sowings respectively on December 10th 1999 and November 29th 2000. The biotype showed a typical biennial behaviour, always reaching the flowering stage in the early summer of the second year after sowing: the overall field performance appeared to be good, and every year the plants went on producing new branches and flowers, even without the recourse to irrigation. The chemical analyses did not show any significant variation of oil composition among the different collection years, whereas a strong differentiation was always observed between the essential oil composition from leaves and flowers.

A. Carrubba, R. la Torre, R. Piccaglia, M. Marotti - "Characterization of an Italian biotype of Clary Sage (*Salvia sclarea* L.) grown in a semi-arid Mediterranean environment" - *Flavour and Fragrance Journal*, 2002, 3: 191 – 194.