INTRODUCTION

The studied area is a part of east Nile Delta region (Sharkiya Governorate). It comprises well established farmed lands as well as newly reclaimed lands of Salhiya. Sharkiya Governorate lies between 30° 30` and 30° 52 and 30° 41` and 31° 40`. It is bounded at the north by Manzala Lake, by Qalubiya at the South, by Ismailiya and Port Said at East and by Dakahliya Governorate at the West. The total of area of the governorate is about 988156 Feddan.

According to Abd El-Salam *et al.* (1973), the area under investigation can be classified into desert region in south and south east, salt marshes in the north and north east and old cultivated land in the west. El-Fayoumy (1968) reported that the north part is characterized by fluviomarine marsh soils occupy most of the area. The middle of the area is occupied by plain with land scape characterized by sand dunes of active types and sandy sheets.

The soils of sandy sheets are composed of loose very coarse sand particles derived from the wind blown sand, which accumulates in the plain. Mean while the southern part is occupied by soils of old Nile terraces of upper and lower level (Ibrahim, 1979). Soil is mostly surface deposits that have their features related primarily to genogenetic factors and only partly to pedogenitic factors and these are mainly geochemical and geophysical rather than biogeochemical.

Following Täckholm (1974), the flora of the studied area belongs to the Ithmic desert, which seem to be extended from several adjacent regions namely: the Nile Delta, the Eastern Desert, the Mediterranean coastal region, Sinai and the Nile Vally.

The vegetation of the studied area can be classified according to habitat conditions into:

1- Vegetation of the desert and salinized ecosystem.
2- Vegetation of reclaimed lands.
3- Vegetation of agricultural ecosystem (cultivated lands) including the newly reclaimed as well as the well established and the old farmed lands.
4- Vegetation of urbanized areas.
5- Vegetation of wetlands.

Shams and Abd Al- Fattah (1987) classified the vegetation of Salhiya area into vegetation of sand formation habitats and vegetation of salt marshes habitat, the vegetation of sand formation habitat is less prominent as component of the plant cover of Salhiya area than the salt marsh vegetation. They added that the distribution of the community types within the surveyed area is mainly affected by soil attributes and the ability of species to adapt themselves against the prevailing conditions.Several investigators concentrate on the study of weed vegetation ecology including Simpson (1932), Tadros and Atta (1958), Boulos (1967), El-Hadidi and Ghabour (1968), Abd El-Hamid (2005).

Shams *et al.* (1986) classified the weeds flora associated with different cultivated crops and orchards in Qalubiya province into: summer, winter and all year round weeds. They added that weed assemblage of one definite individual crop plant and orchards were studied by: Imam and Kosinová (1972) in rice fields, Abd El-Ghani and Amer (1990) in broad been fields, Abd El-Raouf *et al.* (1993) in wheat fields, Abussteit *et al*. (1993) in maiz fields, Mohamed and Hassan (1995) in cotton fields, El-Kady *et al.* (1999) in orchards and El-

Halawany (2000) in fields of date palm. Abd El-Naby, (2005) recorded that these assemblages were correlated in their distribution with environmental factors, phytogeagraphical distribution and seasonality (summer, winter and all year round crops).

The present study aims at:

1- Studying the phytosociological structure of the vegetation of the studied area by using the multivariate analysis.
2- Providing aquantitative assessment of main environment factors which govern the distribution of weeds in different habitats.
3- Monitoring the phonological aspect of the recorded species.
4- Elucidating the economical importance, dispersal type and physical deference.