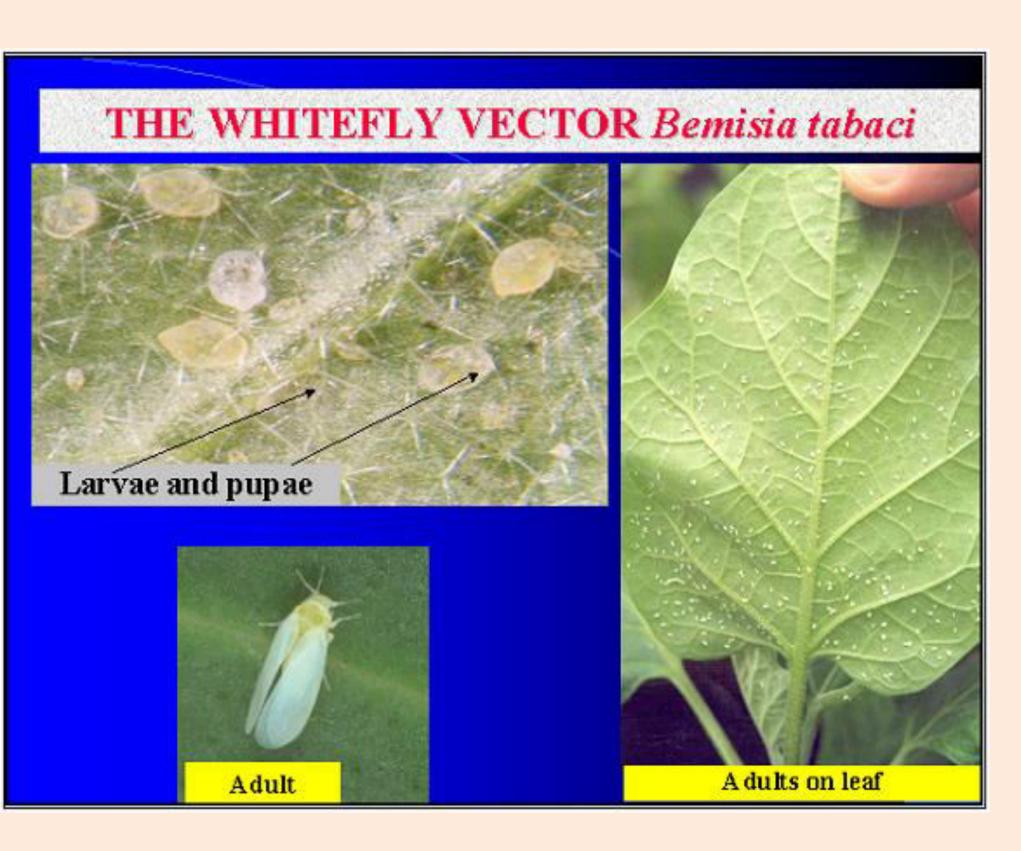
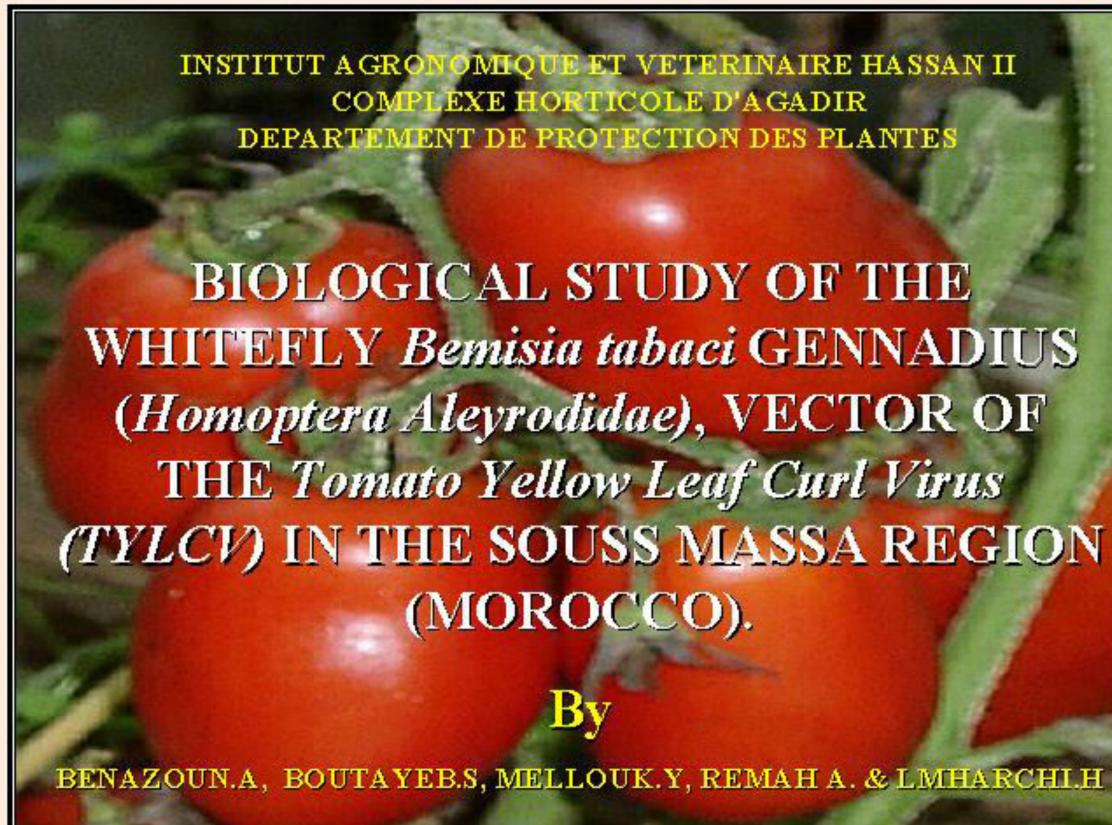
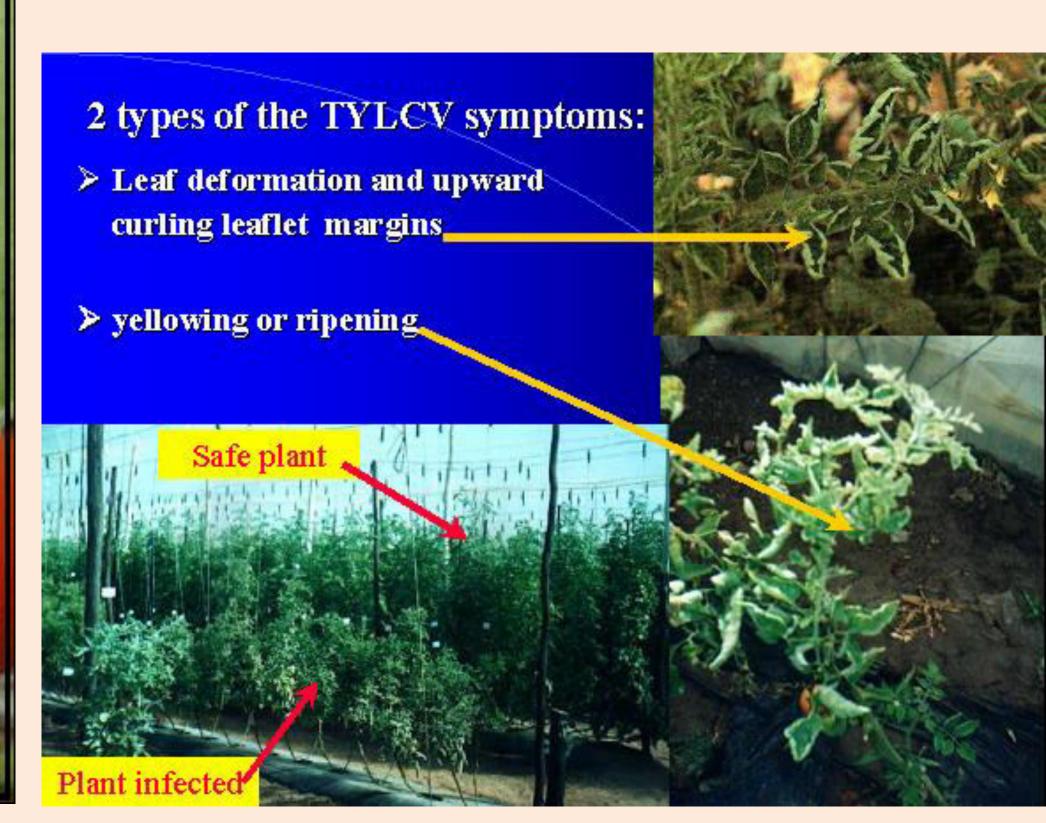
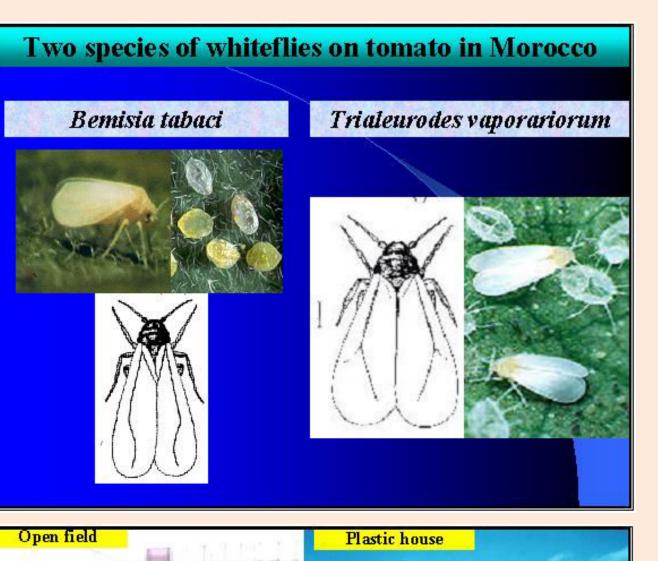
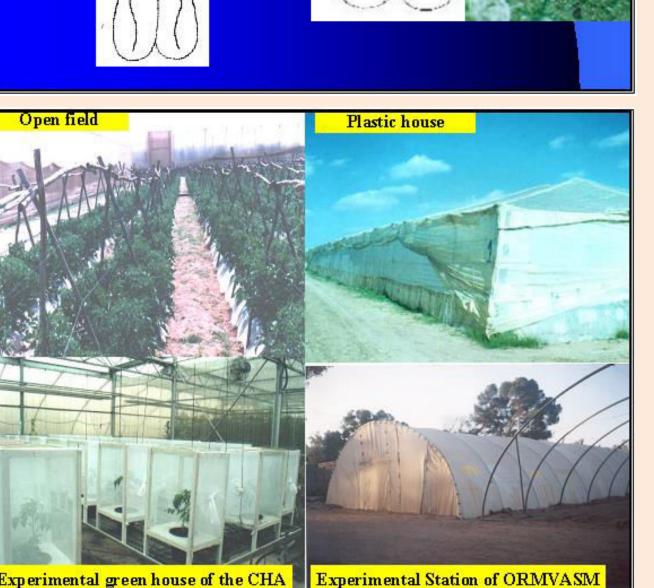
## 55th International Symposium on Crop Protection. May 6, 2003 Ghent. Belgium







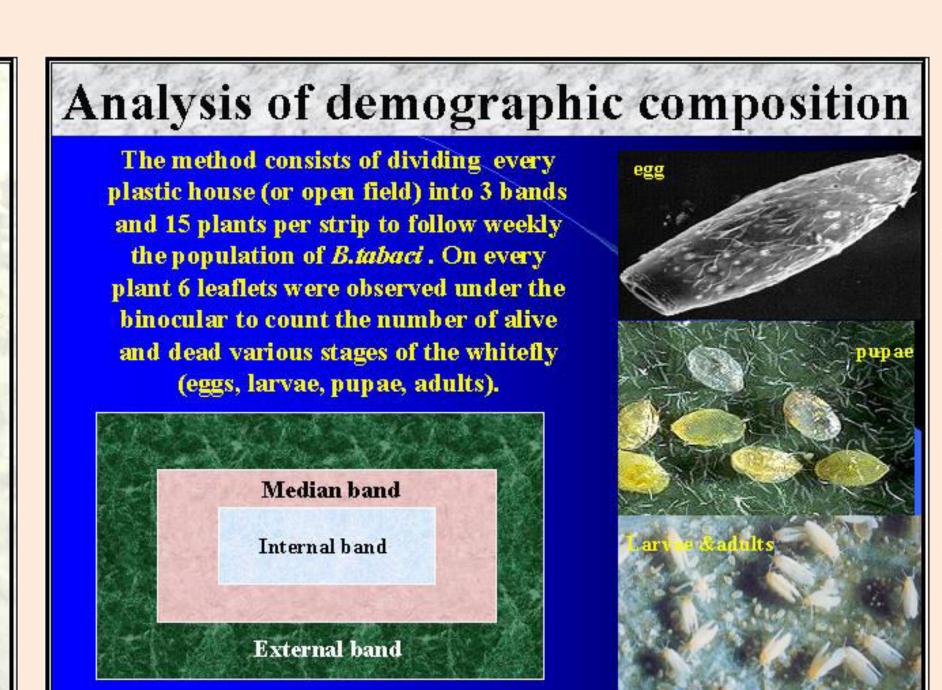


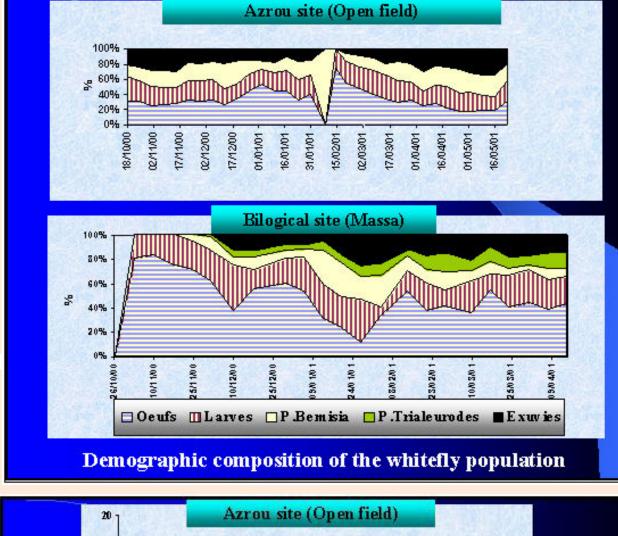


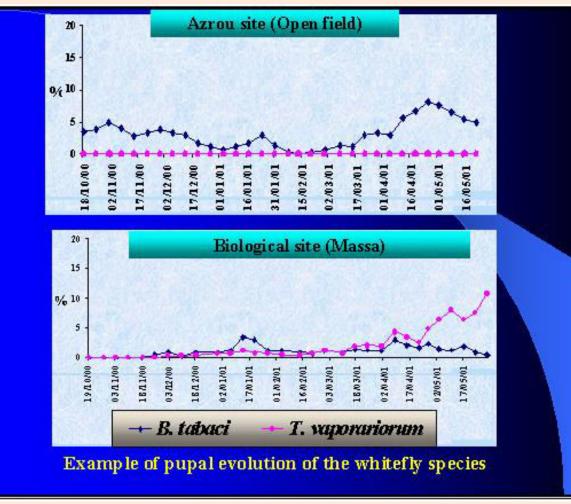
## Introduction

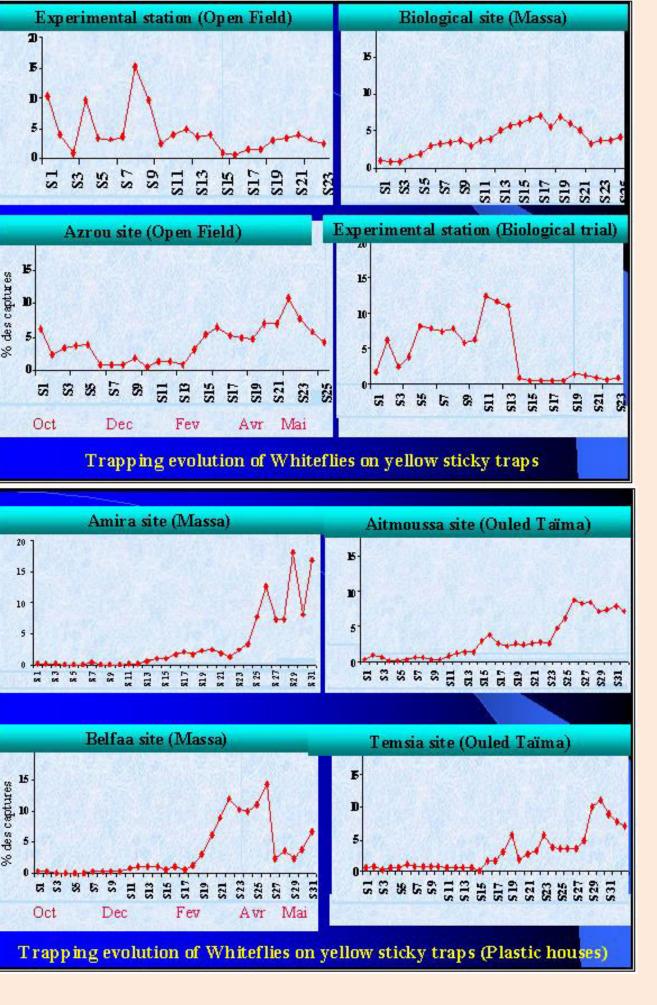
The Tomato Yellow Leaf Curl Virus (TYLCV) was detected for the first time in the Agadir area in 1998. Since then, it is causing heavy losses of the tomato crops, which have great importance in the Horticultural production of Morocco. A series of studies were conducted during the cropping year 2000 - 2001 in order to study the biology of the whitefly Bemisia tabaci the main vector of the TYLCV. Many sites were chosen: a group of plastic houses in the Souss Massa, the experimental Station of the ORMVASM in Ait Amira and the experimental green house at the Agronomic and Veterinary Institute. The proportion of B.tabaci (in relation to Trialeurodes vaporariorum) varies from 48 to 84% in this region. Two main methods were used to follow the biological cycle of this whitefly:

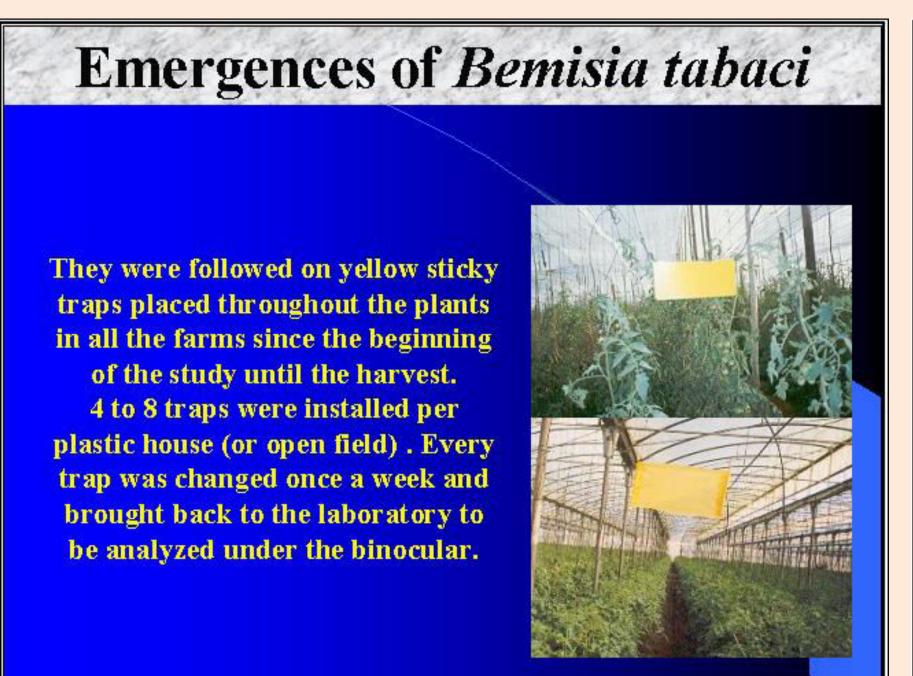
 The observations of emergence on sticky traps; the demographic composition analyzis of the population (eggs, larvae, pupae and adults) on the plants.



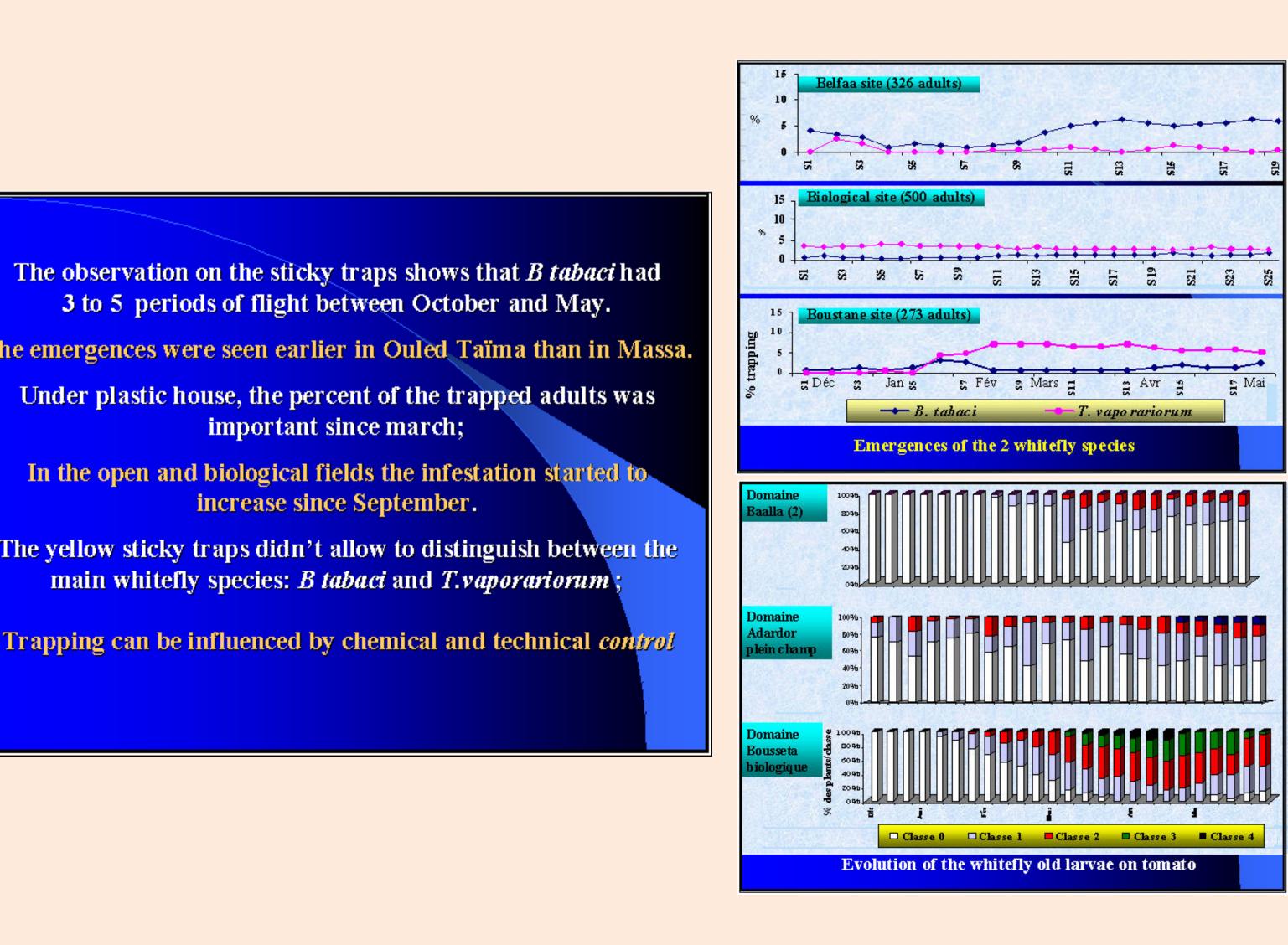


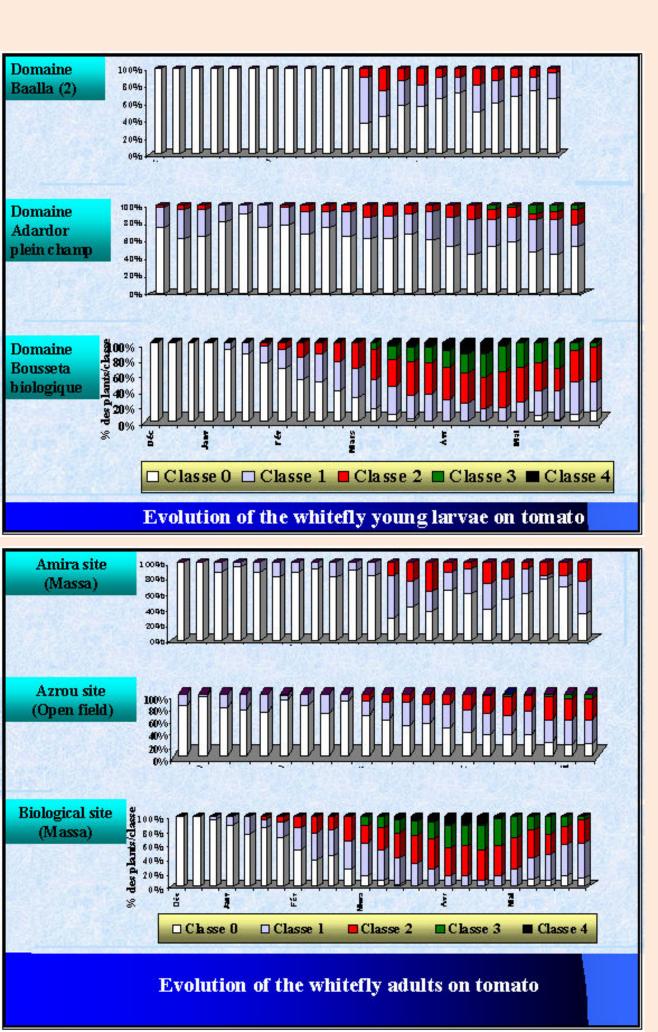


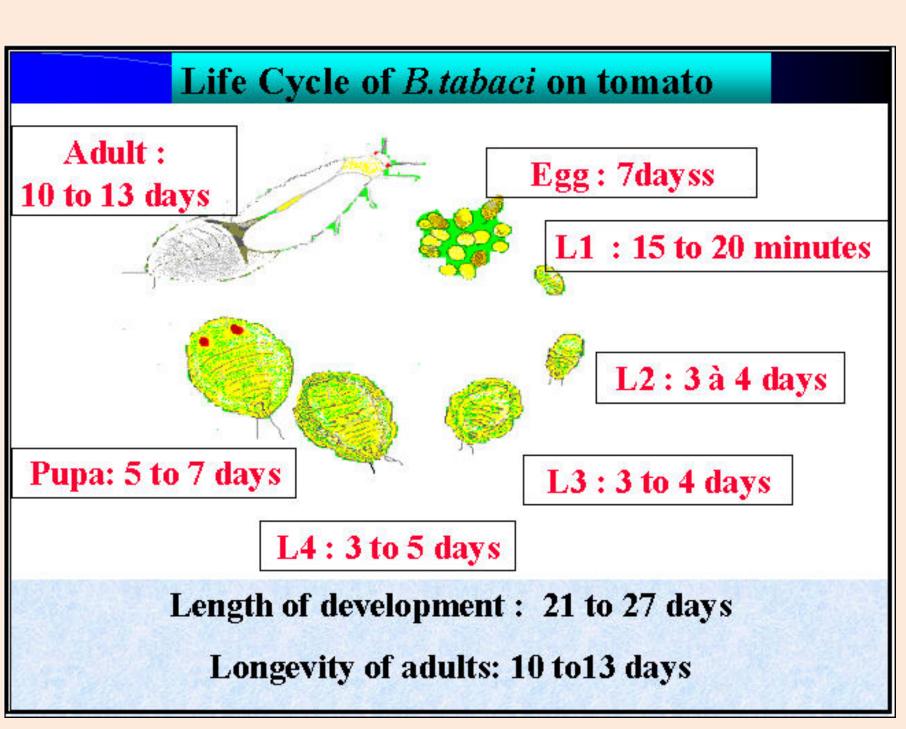




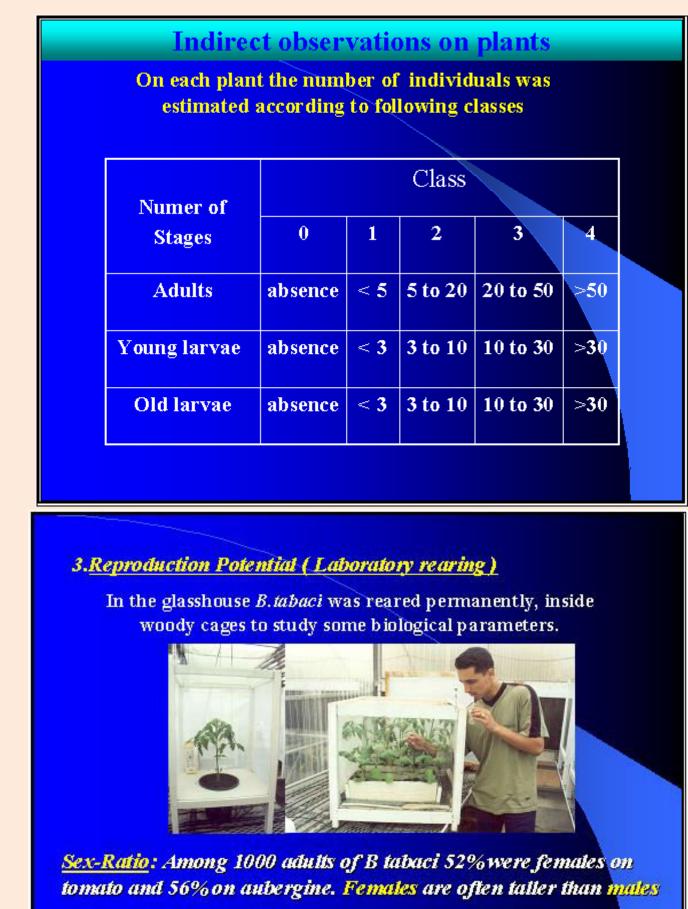
The observation on the sticky traps shows that B tabaci had 3 to 5 periods of flight between October and May. The emergences were seen earlier in Ouled Taïma than in Massa. Under plastic house, the percent of the trapped adults was important since march; In the open and biological fields the infestation started to increase since September. The yellow sticky traps didn't allow to distinguish between the main whitefly species: B tabaci and T.vaporariorum;







B tabaci evolves between October and May into 3 to 4 generations. The first adults start to emerge since the beginning of November; All the stages of the whiteflies are present in variable proportions: - Eggs: 40 to 80% (October - January)/ 0 to 60% (February-May). They were laid in great number in period of heat, and resist better to cold, and chemical control than the other stages; Larvae: 0 to 20% (October-February)/ 5 to 40 % (March-May); - Pupae: 0 to 30% between October and May; - Exuviae of emergence: represented only in small proportions between October and March. After they become too numerous because the migration of the adults towards other vegetable crops. The analysis of demographic composition allows to follow the evolution of the whitefly population (B. tabaci and T.vaporariorum) through distinction between their pupae.



Fecundity: Each female layed approximately 100 eggs