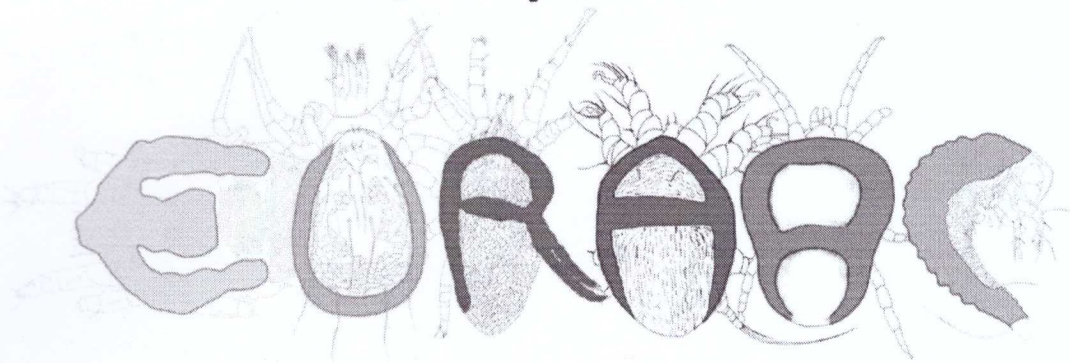


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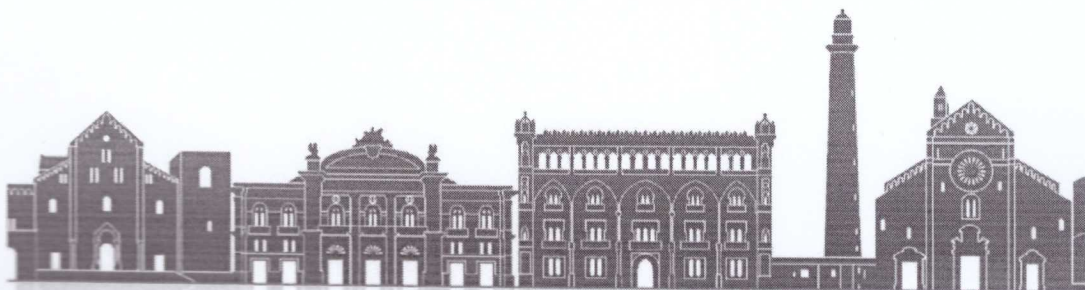
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**PROGRAM AND BOOK OF ABSTRACTS**



These symptoms were observed for the first time during 2017 in Northern Val di Non district (Trentino region), which is one of the most important apple-growing areas in Northern Italy. In the same year similar symptoms were recorded in a number of orchards located in Emilia-Romagna region (Northern Italy). Blisters caused by eriophyid mites were commonly found on apple leaves as well as on small fruits. Eriophyid mite specimens collected from leaf blisters and buds of symptomatic apple plants were examined using both molecular and morphological approaches. The DNA from single individuals was isolated using Chelex protocol and the *COI* region of mitochondrial DNA was amplified and sequenced. The analysis of sequences and of morphological features confirmed that eriophyid mites collected from blisters and buds of symptomatic apple plants belonged to *E. mali*. This species has been recorded in North America, New Zealand, the European part of Russia, many European countries (Belgium, Finland, Czech Republic, Poland, Germany, Hungary, Bulgaria, Slovenia, Bosnia and Herzegovina, Croatia and Serbia), South Africa and Zimbabwe, but it was never recorded in Italy. Implications for IPM in apple orchards are discussed.

## Delimitation of *Cecidophyopsis* and *Cecidophyes* (Eriophyidae: Cecidophyinae) species - linear morphometric methods

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Although eriophyoids are considered a group of microscopic organisms with simplified bodies, more than 100 characters and 250 character states related to the body and legs can be used in their systematics. It has been demonstrated that some of these taxonomic characters are more prone to homoplasy. The aim of this study was to evaluate the diagnostic value of 35 morphological traits, analyzed by linear morphometrics, for the delimitation of 14 species from two genera: *Cecidophyopsis* (*C. vermiformis*, *C. ribis*, *C. malpighianus*, *C. hendersoni*, *C. verilicis*, *C. rosmarinusis*, *C. psilaspis*) and *Cecidophyes* (*Ce. galii*, *Ce. rouhollahi*, *Ce. glaber*, *Ce. gymnaspi*, *Ce. nudus*, *Ce. Psilonotus*, *Ce. lauri*). Multivariate analysis of variance (MANOVA) revealed statistically significant interspecies differences (Wilks'  $\lambda = 0.0000$ ;  $F_{455,4357.726} = 65$ ;  $P = 0.0000$ ). Canonical variate analysis (CVA) indicated clear segregation of species belonging to *Cecidophyopsis* and *Cecidophyes* genera along the CV1 axis. This trend was also supported by the UPGMA cluster analysis. Morphological traits that contributed most to the distinguishing along the CV1 axis were: numbers of dorsal and ventral semiannuli, body width at the level of the *f* and *c2* setae, distances between the *1b* - *1a* tubercles, distance between *d* setae and prodorsal shield width. According to the squared Mahalanobis distances, the greatest morphological separation was between *C. hendersoni* and *C. ribis* (*Cecidophyopsis* cluster) and *Ce. psilonotus* and *Ce. lauri* (*Cecidophyes* cluster). In addition, *C. vermiformis* and *C. ribis* (*Cecidophyopsis* cluster), as well as *Ce. galii* and *Ce. glaber* (*Cecidophyes* cluster), showed morphologically very close relationships.