

STRUCTURE OF GENETIC DIVERSITY OF WILD AND CULTIVATED FIG TREE
IN TUNISIA BY THE COMBINED ANALYZES OF SCOT AND RGA MOLECULAR
MARKERSHAFFARS,¹ AOUNALLAH A.¹, HANNACHI SALHI A.¹ BARAKET G.¹¹: Department of Biology, Faculty of Sciences of Tunis, University of Tunis El Manar, University Campus El Manar 2092, Tunis, Tunisia.*Corresponding author: haffar_sahar@gmail.com

The measurement of genetic diversity within and between populations is crucial to guide research methods conservation of plants and their sustainable use for genetic improvement. This work is devoted to a combined analysis of data from the two typing systems for a more complete understanding of the diversity available in the wild and cultivated Tunisian fig tree for better exploitation in the conservation and the definition of selection and conservation strategies. 12 SCoT primers and 5 RGA primers were used on 62 Tunisian fig trees. Results and conclusion: These primers revealed 139 SCoT-RGA markers (86.88%) that were found to be polymorphic. The diversity parameters showed the efficiency of the SCoT-RGA primers and the high level of polymorphism detected in the two compartments of fig trees studied. A high number of effective migrants was detected ($N_m = 5.27$) reflecting the significant gene flow recorded between cultivated and wild fig trees. Indeed, the value of G_{st} recorded is 0.087 and AMOVA revealed significant differences in the distribution of perceived genetic diversity rather within groups (87%) than between groups (13%) of fig trees studied. The combined dendrograms display three main groups asserting the topology of the dendrogram obtained by the SCoT markers. The results suggest that SCoT markers can be used as reliable and informative markers to detect levels of polymorphism and draw up the genetic links in the species *Ficus carica* L.

Keywords: Cultivated, Fig, SCoT-RGA, Tunisian, wild.



LES 2^{ÈMES} JOURNÉES SCIENTIFIQUES INTERNATIONALES

BIODIVERSITÉ, ENVIRONNEMENT & SANTÉ

ATTESTATION DE PARTICIPATION

Délivrée à

Sahar HAFFAR

*Pour sa participation active aux
2^{èmes} journées internationales "Biodiversité, Environnement & Santé"*

Hôtel Skanes Sérail, Monastir, du 5 à 7 Mai 2023

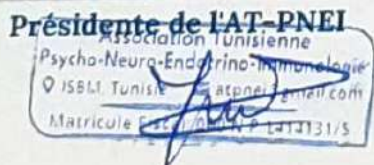
en présentant une communication Orale:

STRUCTURE OF GENETIC DIVERSITY OF WILD AND CULTIVATED FIG TREE IN TUNISIA BY
THE COMBINED ANALYZES OF SCOT AND RGAP MOLECULAR MARKERS

HAFFAR S., AOUNALLAH A., HANNACHI SALHI A., BARAKET G.

Signature

Pr. Besma BEL HADJ JRAD



INSTITUT
FRANÇAIS
TUNISIE

ECOLE
DOCTORALE
TUNISIE

ISBM
العهد العالي للبيوتكنولوجيا بالمنستير
Institut Supérieur de Biotechnologie de Monastir