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TREND ANALYSIS OF AEROBIOLOGICAL INDICATORS  
ASSOCIATED WITH ALLERGENIC POLLENS  
IN EMILIA-ROMAGNA, NORTHERN ITALY

Stefano Marchesi

Arpae Emilia-Romagna,  
Regional Agency for Prevention, Environment  
and Energy of Emilia-Romagna

Technical Direction

Regional Center for environment, prevention and health



# Aerobiological network in Emilia-Romagna



# POLLEN SEASON INDICATORS

## PHENOLOGICAL INDICATORS

START  
DATE

PEAK  
DATE

END  
DATE

## POLLEN PRODUCTION INDICATORS

PEAK  
VALUE

POLLEN  
INDEX

SEVERITY

KENDALL  $\tau$  COEFFICIENT

$$\tau = \frac{S}{D} = \frac{\sum_{i < j} \text{sgn}(x_j - x_i) \text{sgn}(y_j - y_i)}{\frac{n(n-1)}{2}}$$

MEASURE OF THE MONOTONIC TREND

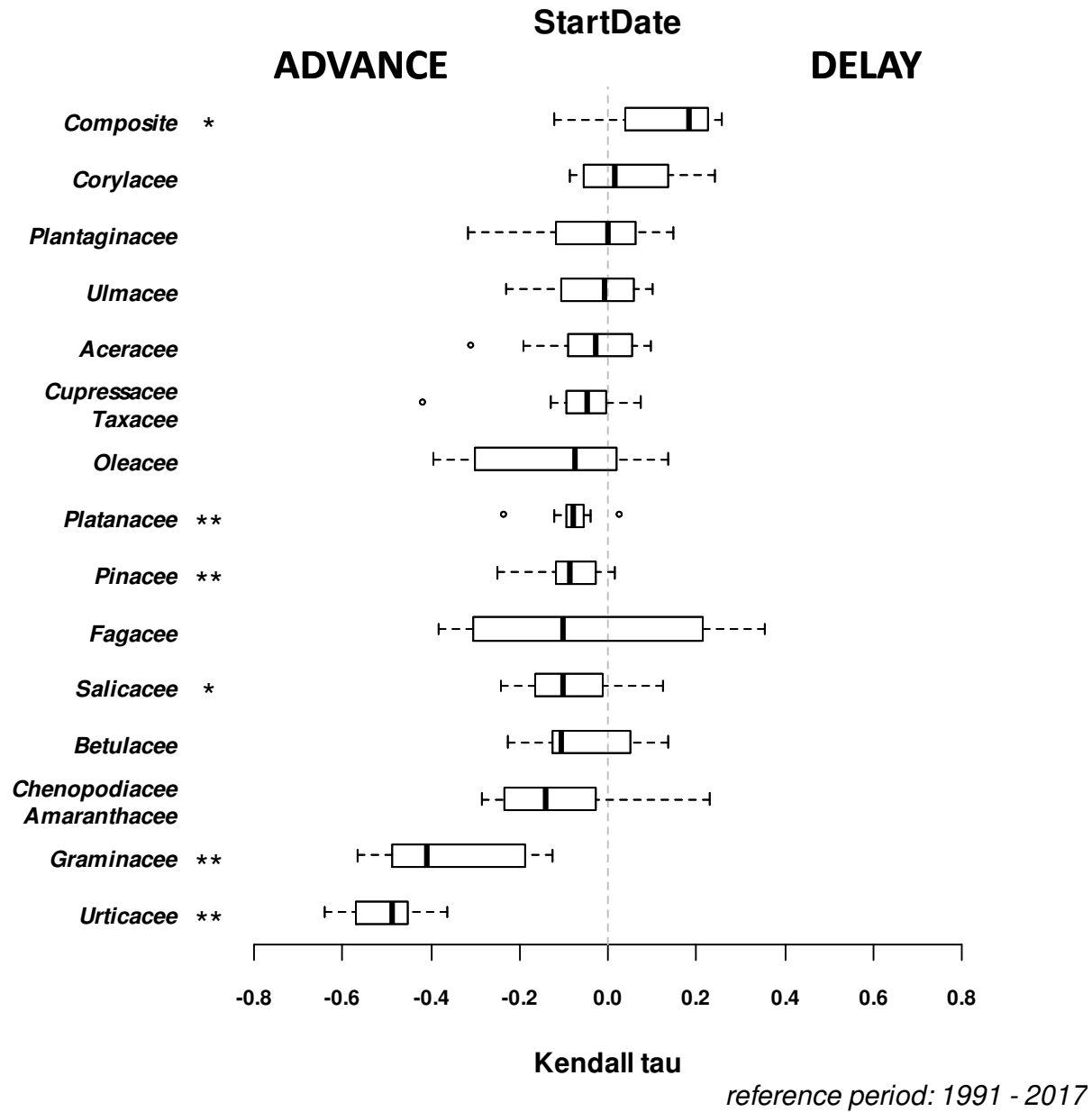


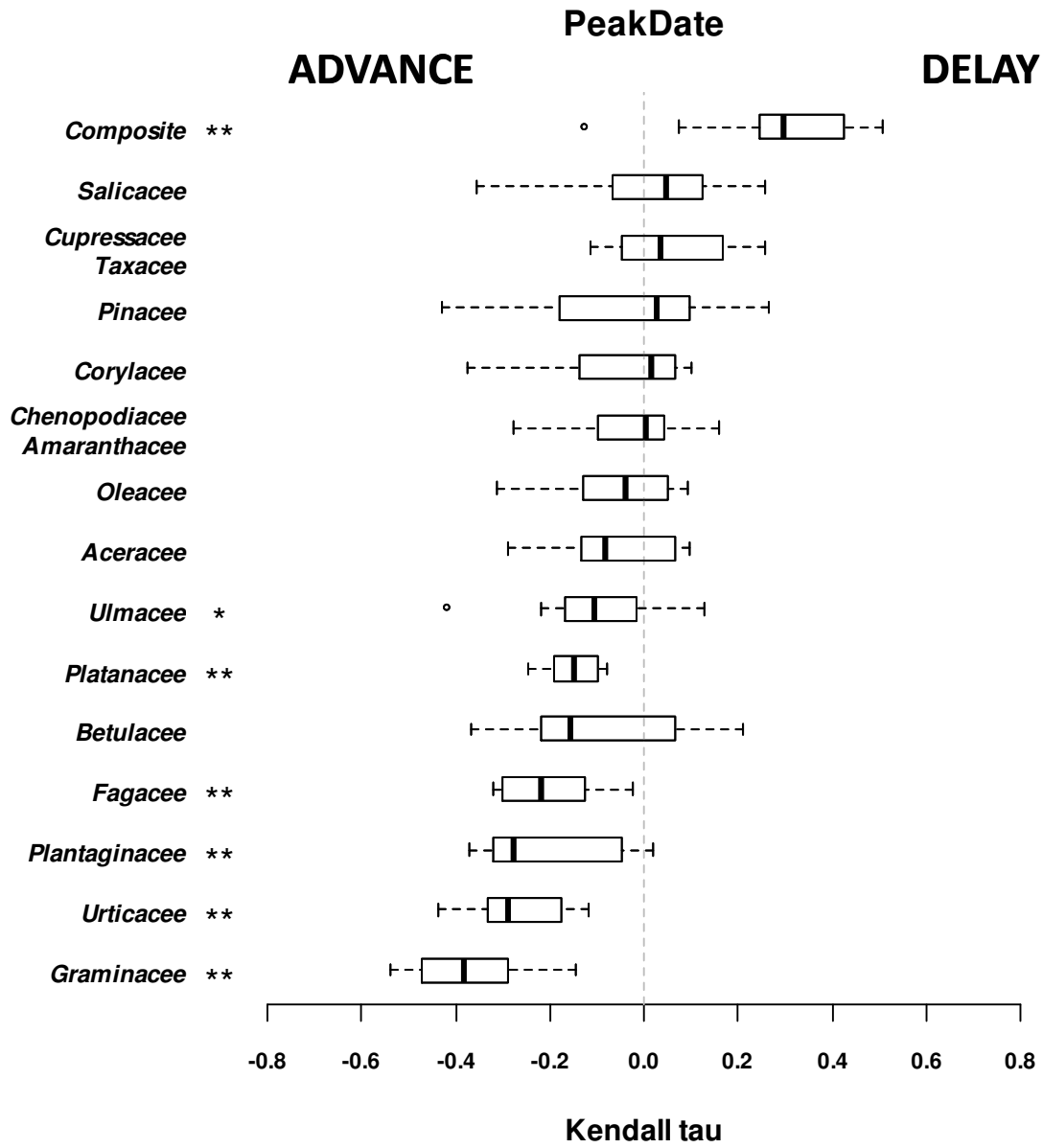
COEFFICIENT VALUE IN THE RANGE (-1, +1)

COMPARISON BETWEEN EACH VALUE  
AND THE NEXT ONE



SUM OF CONCORDANT AND  
DISCORDANT TERMS





reference period: 1991 - 2017

