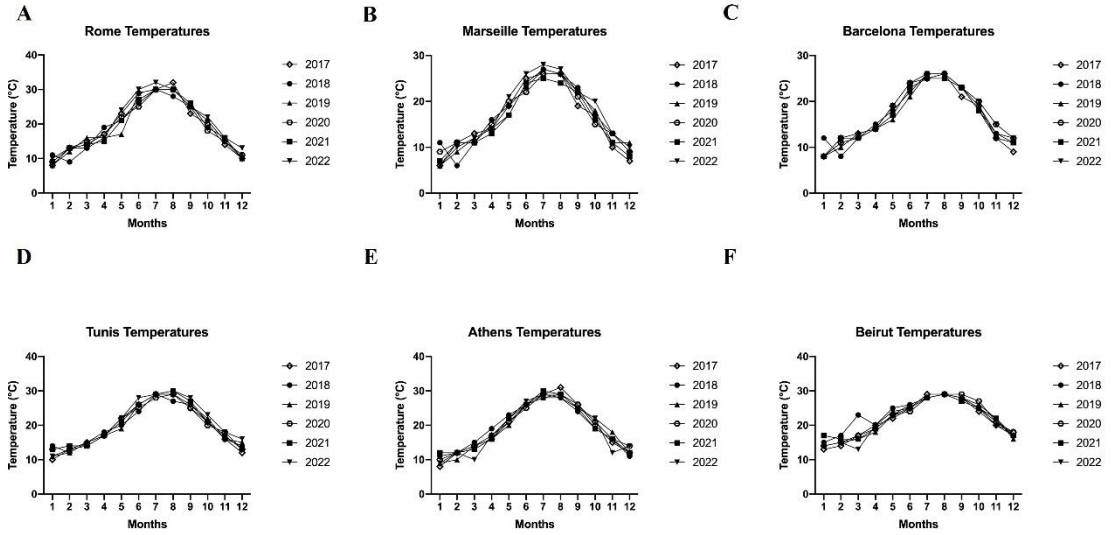

Figure S1. We also compared the average monthly temperatures (expressed in °C) of Rome (A), Marseille (B), Barcelona (C), Tunis (D), Athens (E) and Beirut (F) in 2017, 2018, 2019, 2020, 2021, 2022.

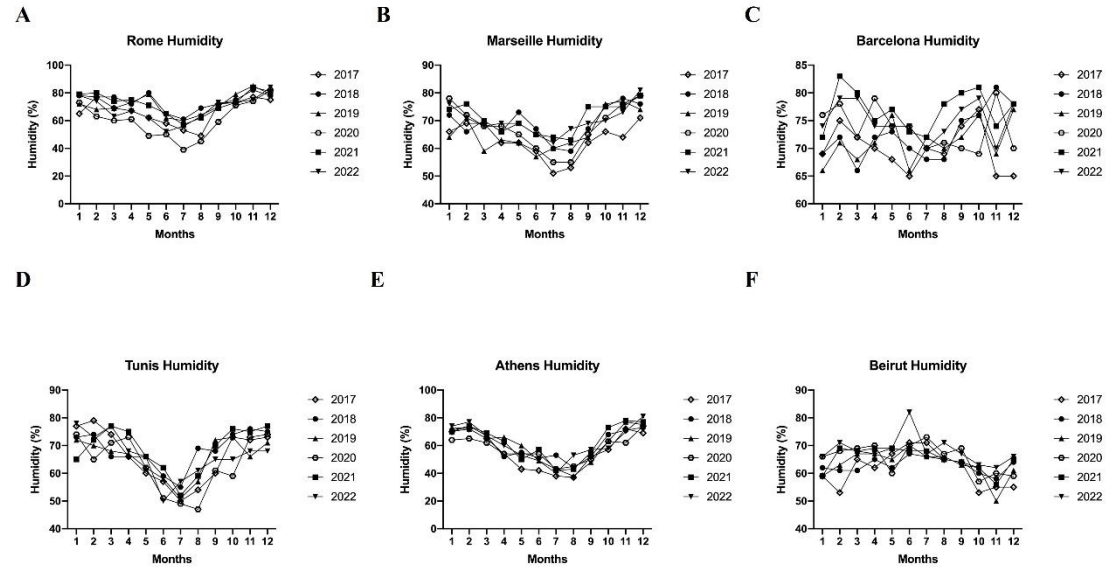

Figure S2. Average monthly humidities (percentage) in Rome (A), Marseille (B), Barcelona (C), Tunis (D), Athens (E) and Beirut (F), in 2017, 2018, 2019, 2020, 2021, 2022.

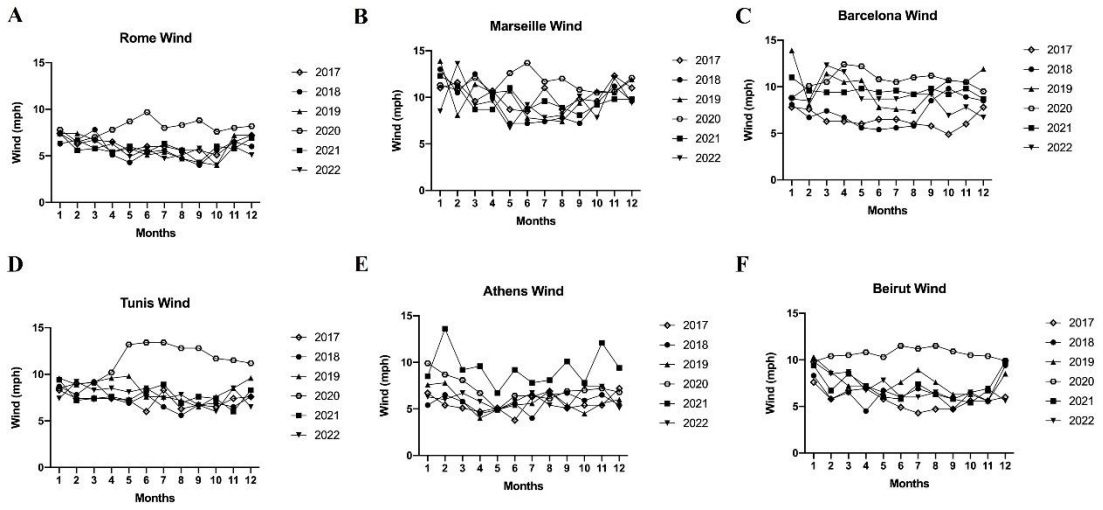

Figure S3. Average monthly windiness (miles per hour-mph) of Rome (A), Marseille (B), Barcelona (C), Tunis (D), Athens (E) and Beirut (F), in 2017, 2018, 2019, 2020, 2021, 2022.

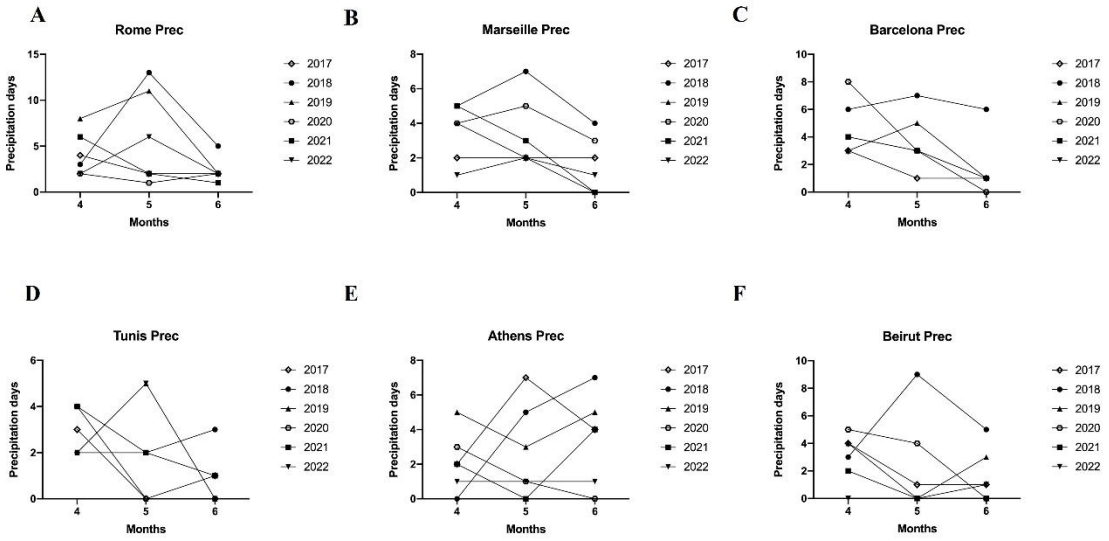

Figure S4. Average monthly precipitations (expressed in rainy days) during the *O. europaea* flowering period in different Mediterranean cities from 2017 to 2022 in April-June in the cities of Rome (A), Marseille (B), Barcelona (C), Tunis (D), Athens (E) and Beirut (F).

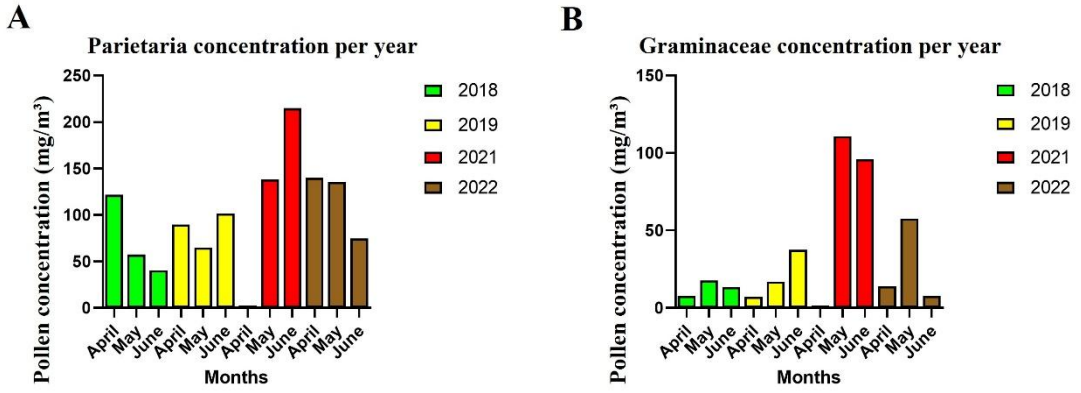

Figure S5. Parietaria (A) and Graminaceae (B) pollen concentration per year, based on *O.* europaea flowering period (April-June) with the sum of monthly pollen concentrations in the city of Bari.

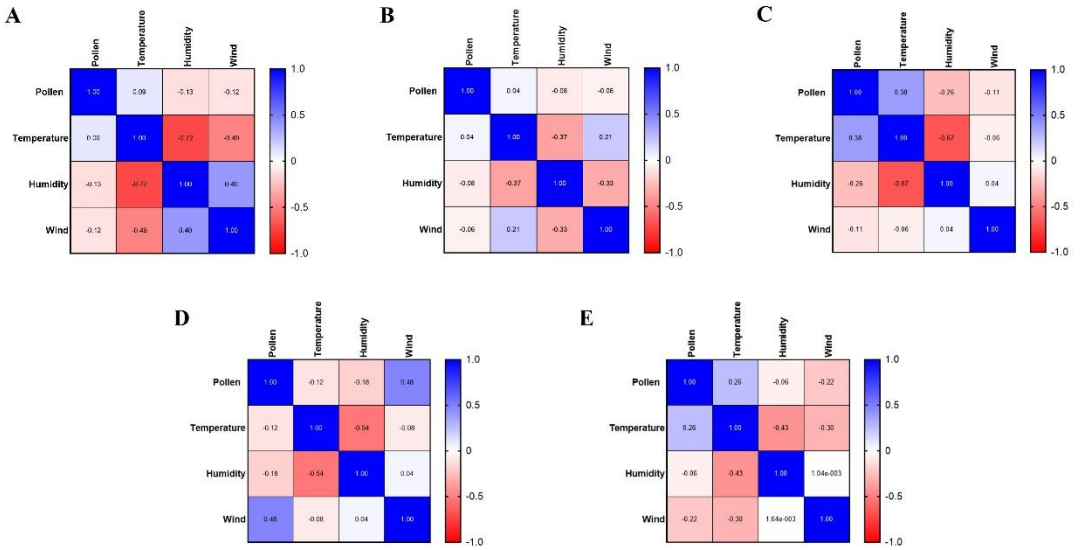

Figure S6. A four-factor matrix was created including the analyzed pollen, temperature, wind, and humidity for the years 2017 (A), 2018 (B), 2019 (C), 2021 (D), and 2022 (E).