INTRODUCTION

Plant phenology is one of the most reliable climate change bioindicator, since it is strongly affected by climatic and environmental fluctuations (e.g., air temperature, photoperiod, soil water availability). In many regions periodically experiencing drought, such as the Mediterranean one, plant phenology may reveal important information about plant physiological status. Different methods can be used to study phenology, such as in situ observations and image analysis (satellites, UAVs and webcam installed in field). The present study aimed at developing a monitoring protocol for the Mediterranean vegetation phenology using phenocams, in order to systematically collect data for the improvement of fire risk monitoring system efficiency of the Regione Liguria (supported by PSR 2014-2020 Misura 8.3).

RESULTS AND DISCUSSION

Results showed that phenocams are an efficient tool to monitor vegetation phenology of Mediterranean habitats, which are generally dominated by evergreen species and characterised by complex vegetation mosaics. We were able to highlight intra- and inter-annual fluctuations of vegetation phenology at the species level. The seasonal trajectories provided information about important phenophases, especially flowering and leaf senescence for deciduous species.