



## Science and technology of tree and forest systems

### Research area

### Ecology and sustainable forest management

#### Topics

- Tree water relations and tree ecophysiology (Anfodillo, Petit).
- Tree ring and cell size analysis and relationships with the environment (Carrer).
- Strategies for biodiversity conservation (Cattaneo, Sitzia, Semenzato).
- Best practices for transforming old coppices to high forests in different environmental conditions and sustainable forest management (Colpi, Pividori, De Mas).
- Planning, design and management of urban open spaces, green infrastructure, nature preserves and ecological corridors (Cattaneo, Semenzato, Sitzia).
- Resilience of different stands to biotic and abiotic disturbances (Lingua, Pividori).
- Remote sensing for understanding landscape and stand dynamics (Pirotti, Lingua).
- Relationship between soil characteristics and ecosystem structure; dynamic of humification processes in different ecosystems (Zanella).
- Stand structure and dynamic in different ecosystems (Anfodillo, Carrer, Lingua).

#### People

Prof. Tommaso Anfodillo (tommaso.anfodillo@unipd.it)

Prof. Marco Carrer (marco.carrer@unipd.it)

Prof. Dina Cattaneo (dina.cattaneo@unipd.it)

Prof. Cristiana Colpi (cristiana.colpi@unipd.it)

Prof. Giovanna De Mas (giovanna.demas@unipd.it)

Prof. Emanuele Lingua (emanuele.lingua@unipd.it)

Dr. Gai Petit (gai.petit@unipd.it)

Dr. Francesco Pirotti (francesco.pirotti@unipd.it)

Prof. Mario Pividori (mario.pividori@unipd.it)

Prof. Paolo Semenzato (paolo.semenzato@unipd.it)

Dr. Tommaso Sitzia (tommaso.sitzia@unipd.it)

Prof. Augusto Zanella (augusto.zanella@unipd.it)

#### Research Projects

- Evaluation of innovative methods to determine conservation levels in Sites of Community Importance. Parco Regionale dei Colli Euganei.
- Forestry of invasive alien species driving changes in plants and soil microbiota communities: the case of the black locust (*Robinia pseudoacacia* L.) in Natura 2000 sites. Athenaeum Research Project 2015. University of Padova.
- NEWFOR - New technologies for a better mountain forest timber mobilization.
- Production of Prioritized Action Framework for Natura 2000 (PAF) for the Regione Veneto.
- Rock the Alps - Harmonized ROCKfall natural risk and protection forest mapping in the ALPine Space.
- Soil and global warming USS, 1.4. Soil Classification Commission.
- Water requirements in hazelnut orchards in different climatic regions Ferrero Trading Lux S.A.



**TESAF**