

- 1 **Foreword**
Rita R. Plá, Maria Luisa Pignata and Raquel C. Jasan
- 4 **Native trees for environmental quality assessment in an ecological corridor of Atlantic Forest**
André L.L. de Araújo, Elisabete A. De Nadai Fernandes, Márcio A. Bacchi and Elvis J. França
- 19 **Assessment of acid-base buffering properties of *Flavoparmelia caperata*: influence of age and pollution exposure**
R.M. Godinho, Tona G. Verburg, Maria do Carmo Freitas and Hubert T. Wolterbeek
- 32 **Survey of lanthanoids in plants from a tropical region**
Elvis Joacir De França, Elisabete A. De Nadai Fernandes, Christian Turra, Márcio A. Bacchi, Camila Elias, Fábio Sileno Tagliaferro, Cássio Franco Moreira, Andreza Portella Ribeiro and Rubens Cesar Lopes Figueira
- 49 **Dynamics of element accumulation and release of *Flavoparmelia caperata* during a long-term field transplant experiment**
R.M. Godinho, Tona G. Verburg, Maria do Carmo Freitas and Hubert T. Wolterbeek
- 60 **Relationship between trace elemental composition in *Fraxinus pennsylvanica* bark and the incidence of some respiratory diseases in Córdoba, Argentina**
Eduardo Daniel Wannaz, Hebe Alejandra Carreras, Carlos Alberto Pérez and María Luisa Pignata
- 72 **Using k_0 -UNAA for the determination of depleted uranium in the moss biomonitoring technique**
Peter Vermaercke, Liesel Sneyers, Fulvio Farina Arboccò and Yulia Aleksiyayenak
- 84 **Evaluation of atmospheric particle dispersion at a contaminated mine using biomonitors**
Hossain M. Anawar, Nuno Canha and Maria do Carmo Freitas

- 93 **Cysteine synthesis in *Scorpiurum circinatum* as a suitable biomarker in air pollution monitoring**
Simona Carfagna, Vincenza Vona, Giovanna Salbitani, Sergio Sorbo, Nicola Lanza, Barbara Conte, Vittoria Di Martino Rigano, Rosa Castaldo Cobianchi, Biagio Golia and Adriana Basile
- 106 **The scalp hair as a monitor for trace elements in biomonitoring of atmospheric pollution**
Sofia Zaichick and Vladimir Zaichick
- 125 **Investigation of associations between chemical element contents in native lichens and childhood leukaemia**
Maria do Carmo Freitas and Maria Martinho
- 134 **Airborne chemical elements: correlation between atmospheric levels and lichen content**
Abel O.M. Carvalho and Maria do Carmo Freitas
- 148 **Atmospheric chemical element pollution in an urban water-associated environment**
Elvis Joacir De França, Leandro Camilli, Elisabete A. De Nadai Fernandes, Camila Elias, Vanessa Santos Rodrigues, Isabel Pires de Oliveira Cavalca, Felipe Yamada Fonseca and Claudiney Bardini Jr.