21st World Congress on

NUTRITION & FOOD SCIENCES

July 09-10, 2018 Sydney, Australia

Paulownia Clon in vitro 112®: The tree of the future

Anna Stochmal¹, Barbara Moniuszko-Szajwaj¹, Małgorzata Szumacher-Strabel², Adam Cieślak² ¹Institute of Soil Science and Plant Cultivation, State Research Institute, Poland ²Poznan University of Life Sciences, Poland

The development of civilization forces humanity to introduce changes. A huge step forward was GMO, the next, we believe Lit strongly, is Paulownia Clon in vitro 112°, otherwise known as Oxytree. The ability to absorb a huge amount of carbon dioxide by Oxytree is one of its most well-known properties. Thanks to its huge leaves, whose diameter reaches up to 60 cm, Oxytree contributes to the improvement of air quality, thus climate protection. It absorbs much more carbon dioxide than any other deciduous tree. If oak absorbs 9.1 tons of carbon dioxide/hectare/year, Oxytree absorbs 111 tons. Oxytree is a cross between two species of Paulownia developed at the University of Castilla La Mancha in Spain, where, thanks to selecting only the best features of the species, one of the best varieties of this Asian tree was created. Known as the "Imperial birth tree of luck", Oxytree has already established itself not only on plantations but also in gardens. Thanks to its unique properties, Oxytree reaches even 16 meters in just 6 years. Easy to grow and undemanding and quickly repays its beauty. It takes just a few months to have a unique tree in the garden, whose huge leaves provide a pleasant shade in the summer and purple-white flowers to beautifully decorate the backyard area; within 9-10 years, the front garden may boast a 30 meter tree, whose crown can reach up to 10 meters in diameter. This unique blooming ornamental tree is characterized by rapid growth, but also exceptional durability. Oxytree feels good in both low and high temperatures, tolerates less-favored soils, like sands or various types of wastelands. The imperial tree perfectly coexists with other plant species. Thanks to the fact that its seeds are sterile, there is no question of spontaneous spreading or interference in the local ecosystem. Its wood is 50% lighter than any other and suitable for furniture, parquet. Once dried, it does not take on moisture. This amazing tree is a real perpetuum mobile, because in its 6th year after planting it already reaches 16 m in height and 35 cm in trunk diameter and grows back from the trunk, four to five times after the first cut. Oxygen trees grow straight, their trunk does not have any knots and the root system reaches 9 m deep and absorbs nutrients from there. Thanks to its deep roots, it does not get nutrients from the upper layers of soil that other plants need. Paulownia's research is financed by a grant from the National Center for Research 2016/23/B/NZ9/03427

Biography

Anna Stochmal has completed her PhD in 1997 and in 2012 she was nominated for a Professor of Agricultural Sciences. She has 30 year experience in the isolation and structure elucidation of plant secondary metabolites. She is the Head of Department of Biochemistry in the Institute of Soil Science and Plant Cultivation. She has published nearly 160 papers with impact factors.

asf@iung.pulawy.pl

Notes: