## Mission Possible: Syngenta to Rescue Chestnut Trees in Ukraine

At the end of May L&G business Syngenta presented the TreeCare Program, a pioneering new approach to prevent horse chestnut trees damage and losses to chestnut leaf miner in Ukraine. The event took place on a bright sunny day in the National Botanic Garden after M.M. Hryshko in Kiev, close to the chestnut alleys. It is notable and quite symbolic, that just not far from the event location a magnificent hornbeam grows: Syngenta employees planted this tree back in 2001 to mark the company registration in Ukraine. Now, the hornbeam keeps on growing stronger, just as Syngenta does, continuously delivering the very much claimed innovations for the full growth of agribusiness and lawn & garden segment.

The event aimed to draw attention of the large public and municipal services who care about the landscape and green space management in Ukrainian cities to Syngenta innovative solution able to tackle the issue of the horse-chestnut leaf miner. The pest attacks have scaled up considerably over the last decade in the country. Part of Syngenta's integrated solution is a product Revive, the insecticide of natural origin which has undergone independent trials for environmental safety, human and animals safety. During the event the company experts spoke about the product benefits, its application method to chestnut trees, and actually could demonstrate it live on a trees.

TreeCare is an entirely reliable and cost effective program that calls for revitalization of the social and environmental background of cities. Thanks to the innovative approach to improving health of parks and city nature landscapes, Revive and the certified aplication technology prevents the emergence of the most dangerous pests that weaken and suppress the tree vegetative system. It's worth mentioning that the program is being implemented to protect, prevent and preserve palms, oaks, chestnut trees and other tree species, and Revive has already proven great results in such European countries as Spain, France, Great Britain, Switzerland and other. Soon, this efficient and cost saving solution will appear in Ukraine as well.

'Syngenta always seeks to balance science and nature, investing in global research and development around \$ 1.4 billion every year. Revive is a new insecticide developed for a long term, effective and safe protection of the tree health. Revive can be used to fight against widespread pests in European countries, such as oak processionary moth, red palm weevil, ash decline, other. In Ukraine, we work to get it registered for use on horse chestnut tree which needs protection from the leaf miner', said Svitlana Romashko, L&G Controls Business Manager at Syngenta Ukraine.

A large number of municipal services for landscape management of many cities, in particular, Kyiv, Odesa, Poltava, Kharkiv, Lviv and Cherkasy express their concerns on the chestnut trees health. Loss of trees to pests, diseases and aggressive climatic changes is progressing every season. According to Oleksandr Stryhun, Doctor of Agricultural Sciences, Head of the Laboratory of Entomology of the Plant Protection Institute in Ukraine, the situation with chestnut trees in Ukraine is rather sad now: in early summer leaves of chestnut trees gradually turn yellow and somewhere in August a real yellow-rusty leaf fall begins. One of the reasons to that is the horse-chestnut leaf miner which affects the leaves, weakens the immune system of the tree and potentially leads to its death. Leaf miner appeared on the territory of Ukraine in the late 90's and since then has been spreading rapidly across the of the country.

In case of severe affection, a chestnut tree can completely lose its leaves, which greatly impacts the viability of the tree, causes its autumn flowering, as well as the development of other infections.

Such affected trees are not only a loss to the local budget based on their purchase and planting, but also a negative impact on the landscape aesthetics and the environmental background of the city; there is also a risk or danger to the public and property from the weakened and affected trees.

However, due to Syngenta scientists` work, there is now an opportunity to combat this pest safely. Unlike previous alternative treatment methods, the new application technology provides sustainable management of chestnut trees which does not harm trees, but rather strengthens its protective barrier against diseases, and is safe for environment and public.

'The biological efficiency of one injection is expected to last up to 3 years. There is no exposure to the public, operator or the environment during this application process. Nor does it harm animals and other living organisms, including those microorganisms that live on the surface of the leaves and the bark of a tree. The essential advantage of such treatment is exactly the targeted injection, which makes spraying into the environment or leakage of the drug out the tree trunk impossible', commented Lars Gruchel, Head L&G controls in Central Europe, East Europe and East Africa.

During the event, the Syngenta expert Othmar Ruesch demonstrated the Tree Micro Injection technology in action, a unique application method, designed by Syngenta. Several chestnut trees were treated with Revive, using a special certified equipment. The process involved a series of small 10mm holes, drilled in the lower part of the tree trunk and then hygienically plugged. The plugs are biodegradable. Inserted directly into the tree trunk, the product is transported by the tree vascular system to the branches and leaves during 3 days when reaching a maximum of protection.

It is important to emphasize that the application process is to be carried out only by the operators of the respective partner companies who are trained and certified by Syngenta. The Syngenta Lawn and Garden team is confident of Ukrainian cities` interest in the Micro Tree Injection technology which helps protect chestnut trees from the pest sustainably. Trees play an essential role in the urban space and the environment as well as generate a huge emotive public support, improving the aesthetics and attractiveness of the cities, reducing air and noise pollution. Syngenta L&G team is ready to provide support and know how to rescue chestnut trees in Ukraine.