



Press release

DEINOVE AND TYTON BIOENERGY SYSTEMS FORGE PARTNERSHIP TO COMMERCIALIZE UNIQUE SOLUTIONS IN THE GREEN CHEMICALS SECTOR

- A technological and commercial partnership between Deinove and Tyton BioEnergy Systems, the leader in tobacco technology for green chemicals production
- The synergistic technologies are expected to provide techno-economic benefits in the production of renewable chemicals by lowering feedstock costs and optimizing processing

Montpellier, FRANCE and Danville, Virginia, USA, September 8, 2015 – DEINOVE (Alternext Paris: ALDEI), a biotech company developing innovative processes for producing biofuels and bio-based chemicals by using *Deinococcus* bacteria as host strains, and Tyton BioEnergy Systems (Tyton), a pioneering agricultural biotech company with unique tobacco technology used to produce green chemicals and agricultural products, today announced they have entered into a technological and commercial partnership. The main goal of the partnership is to combine Tyton's energy tobacco feedstock, process and production infrastructure with DEINOVE's Deino-based fermentation solutions in order to produce green chemical compounds of high commercial value.

Tyton's energy tobacco technology combines advancements in plant sciences, agronomics, and processing to produce cost-competitive sugars, oils, proteins and other green chemicals at high profits.

- One acre of Tyton's patented non-smoking tobacco outperforms corn, soy and other cellulosic feedstocks.
- Tyton's tobacco technology platform achieves significant environmental improvements through enhanced crop production techniques and clean, fast industrial processing.

DEINOVE's CBP (Consolidated BioProcessing) solutions are currently optimized on a variety of sugar sources like corn, wheat and urban waste, and they can flexibly utilize simple, starch or cellulosic sugars. The energy tobacco crop developed by Tyton provides a compelling opportunity to diversify applications for *Deinococcus*, and the two companies will explore various renewable chemical options for commercialization, beginning in the southeast region of the United States.

Peter Majeranowski, President of Tyton BioEnergy Systems, said, "We are excited to be working with green chemicals technology leader Deinove to bring to the market a unique, environmentally friendly, and sustainable set of strategically important chemicals."

"From a scientific perspective, Deinove's technology platform represents a crucial step forward in industrial fermentation. The Deinococci bacteria can assimilate partially hydrolyzed sugar chains at high temperature to produce an attractive portfolio of renewable chemicals in a cost-effective way. Together with Tyton's energy tobacco sugars, our partnership is a game changer" added Dr. Iulian Bobe, CTO of Tyton.

"Deinove and Tyton have decided to combine their respective strengths for the targeted production of high value-added molecules from an innovative raw material: energy tobacco. The technologies are highly complementary. Tyton brings an innovative raw material that removes many of the sticking points in green chemistry's value chain, along with access to a high-level industrial fermentation





infrastructure. Deinove focuses on designing cost-saving, high-temperature custom fermentation solutions. Together, we can assemble the most competitive process offering, from a techno-economic point of view," explained Nagib Ward, Executive VP, Business Development at DEINOVE.

"By developing our applications using a new kind of substrate, Deinove continues to expand the industrial and commercial outlook for our process portfolio," said Emmanuel Petiot, CEO of DEINOVE. "Our ambition is to create a maximum amount of value by multiplying market opportunities for our exclusive technology."

About TYTON BIOENERGY SYSTEMS

Tyton BioEnergy Systems is an agricultural biotechnology company that has developed unique tobacco technology to efficiently and economically produce low-cost sugars, oils and proteins at high profits for the green chemical, feed and existing biorefining markets. One acre of Tyton's patented non-smoking tobacco outperforms corn, soy and other cellulosic feedstocks. Through its tobacco technology platform, Tyton is committed to delivering cost-competitive products while protecting the planet. The Company is headquartered in Danville, Virginia, USA.

More information at www.tytonbio.com

About DEINOVE

DEINOVE (Alternext Paris: ALDEI) is ushering in a new era of green chemistry by designing and developing new standards of production based on bacteria of untapped potential: the *Deinococci*. Taking advantage of the bacteria's unique genetic properties and unusual robustness, DEINOVE optimizes natural fermentation and metabolic capabilities of these bacterial "micro-factories" to produce high value-added products from non-food biomass. The Company's primary markets are 2nd-generation biofuels (DEINOL) and bio-based chemicals (DEINOCHEM). On these markets, the Company offers its technology to industrial partners globally.

Listed on NYSE Alternext since April 2010, DEINOVE was founded by Dr. Philippe Pouletty, General Partner of TRUFFLE CAPITAL, and Pr. Miroslav Radman, of the Faculty of Medicine of Paris Descartes University. The company employs almost 50 people in its new offices and laboratories located in Montpellier, France.

More information at www.deinove.com

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