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22nd Century Produces Non-GMO Very Low Nicotine Tobacco

Non-GMO tobacco varieties will open new markets worldwide

CLARENCE, N.Y.--(BUSINESS WIRE)-- 22nd Century Group, Inc. (NYSE MKT:[XXII](#)), a plant biotechnology company that is focused on tobacco harm reduction and cannabis research, announced today that the Company's research collaboration with North Carolina State University has yielded several new Very Low Nicotine (VLN) tobacco varieties that contain no foreign DNA and no trace of genetic modification. The new Very Low Nicotine varieties are ideally suited for use in the Company's X-22 smoking cessation product in development and will also form the basis of other unique 22nd Century VLN products.

In the United States, federal regulation will not treat the new Very Low Nicotine tobacco varieties as "genetically modified;" further, these new proprietary tobacco strains will not be subject to burdensome regulation and import restrictions in most countries around the world. Representing a major improvement on the Company's already successful Very Low Nicotine tobacco, the new proprietary varieties hold immense promise to open up large international markets for the Company. 22nd Century is already in contact with marketers and distributors in countries with GMO restrictions (Japan, India, and Korea) to facilitate the import of products based on the Company's new non-GMO Very Low Nicotine tobaccos.

These second generation non-GMO VLN tobacco varieties also show improved ripening and curing qualities. 22nd Century's new non-GMO Very Low Nicotine tobaccos not only lack foreign DNA, but they are also based on superior foundational varieties. One of 22nd Century's new non-GMO lines is based on a flue cured variety known for its superior growing characteristics and curability, while another of the Company's non-GMO lines is based on one of the most widely grown air-cured burley tobaccos that has excellent disease resistance and yield potential. These new non-GMO Very Low Nicotine tobacco varieties are already under cultivation and study in the Company's laboratories in Buffalo, New York. 22nd Century anticipates having commercial quantities of seed for the non-GMO varieties by 2018.

The non-GMO Very Low Nicotine tobacco varieties are protected by numerous patents under 22nd Century's extensive patent portfolio. The Company's patents also protect additional second generation varieties that are currently in development for the Company at North Carolina State University and in 22nd Century's own laboratories.

"We are absolutely delighted that we have achieved our goal of producing non-GMO Very Low Nicotine tobacco," explained Dr. Paul Rushton, 22nd Century's Vice President for Plant Biotechnology. "Because our new non-GMO varieties contain no foreign DNA, these proprietary varieties will open up huge new markets around the world. What's more, 22nd Century's second-generation non-GMO VLN tobacco varieties produce an even higher quality tobacco that will further improve our Very Low Nicotine finished products."

Professor Ralph Dewey, the Principal Investigator at North Carolina State University, stated, "We are extremely pleased that our project with 22nd Century has been such a success. These exciting new varieties will create important new Very Low Nicotine tobacco products that will avoid the GMO label. We are also pleased that our projects with 22nd Century are ongoing and that we very well may produce exciting additional VLN varieties in the coming months."

About 22nd Century Group, Inc.

22nd Century is a plant biotechnology company focused on technology which allows it to increase or decrease the level of nicotine in tobacco plants and the level of cannabinoids in cannabis plants through genetic engineering and plant breeding. The Company's primary mission in tobacco is to reduce the harm caused by smoking. The Company's primary mission in cannabis is to develop proprietary cannabis strains for important new medicines and agricultural crops. Visit www.xxiiicentury.com and www.botanicalgenetics.com for more information.

Cautionary Note Regarding Forward-Looking Statements: This press release contains forward-looking information, including all statements that are not statements of historical fact regarding the intent, belief or current expectations of 22nd Century Group, Inc., its directors or its officers with respect to the contents of this press release, including but not limited to our future revenue expectations. The words “may,” “would,” “will,” “expect,” “estimate,” “anticipate,” “believe,” “intend” and similar expressions and variations thereof are intended to identify forward-looking statements. We cannot guarantee future results, levels of activity or performance. You should not place undue reliance on these forward-looking statements, which speak only as of the date that they were made. These cautionary statements should be considered with any written or oral forward-looking statements that we may issue in the future. Except as required by applicable law, including the securities laws of the United States, we do not intend to update any of the forward-looking statements to conform these statements to reflect actual results, later events or circumstances, or to reflect the occurrence of unanticipated events. You should carefully review and consider the various disclosures made by us in our annual report on Form 10-K for the fiscal year ended December 31, 2016, filed on March 8, 2017, including the section entitled “Risk Factors,” and our other reports filed with the U.S. Securities and Exchange Commission which attempt to advise interested parties of the risks and factors that may affect our business, financial condition, results of operation and cash flows. If one or more of these risks or uncertainties materialize, or if the underlying assumptions prove incorrect, our actual results may vary materially from those expected or projected.

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