

## United States Department of Agriculture

Research, Education and Economics Agricultural Research Service

January 18, 2011

John Turner Biotechnology Regulatory Services APHIS, Suite 5B05 4700 River Road Unit 147 Riverdale, MD 20737–1236

Dear Dr. Turner:

With this letter we wish to inform APHIS of our plan to freely plant in the field non-genetically engineered plum seedling null-segregant (NS) lines derived from genetically engineered early flowering parents used in the 'FasTrack' plum breeding program.

Our research group has developed an advanced breeding system for perennial fruit trees. To summarize, this 'FasTrack' breeding approach is based upon the utilization of early flowering transgenic plants that express the Poplar (*Populus tremula*) Flowering locus T-like protein (pFT) gene. pFT transgenic plum plants flower at 3-6 months following transformation. When pFT plums are hybridized with non-transgenic plums the pFT transgene segregates. Seedlings carrying the pFT transgene flower within 3-6 months after germination, seedlings without the gene do not. During the backcross stage of breeding early flowering lines are crossed with non-transformed lines. Following an appropriate number of backcrosses, seedlings that do not contain the pFT transgene or any other transgenes, such as marker genes, are selected. These trees are determined to be NS following verification of the absence of any transgenes or parts of transgenes through phenotypic and molecular analyses. Phenotypic characters of NS include the lack of early flowering and a normal growth habit. In contrast, pFT plants flower early and present a clearly distinguishable bushy growth habit. Molecular analyses to confirm the absence of pFT and all other transgenes include PCR and DNA blotting using multiple primers and probes, with appropriate controls. NS trees would then be field planted and evaluated as potential cultivars.

We presented details of 'FasTrack' breeding to APHIS and other regulatory officials during a meeting at APHIS headquarters in Riverdale, MD on June 2, 2009. The consensus of that meeting was that NS plants would not be regulated. We are confident that NS trees will not require APHIS oversight. We request a response from APHIS confirming agency concurrence before spring planting on May 2, 2011.

Sincerely,

Ralph Scorza

Research Horticulturist

Ann Callahan

Research Geneticist

