

**FIELD CORN.** (*Zea mays*).  
 Advance LCO Application with Starter  
 Improved Early Season Plant Development & Yield

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**Effects on Corn Yield from applications of Advance LCO, 2010, 2011 & 2012**

Data collected in 2010 and 2011 from demonstration plots with Advance LCO applied in furrow or in 2X2 band with starter fertilizer showed increases in yields by 8.3 and 8.0 bu/A respectively for all treatments regardless of application method. In 2010, Advance LCO + starter applied in-furrow yielded 7.96 bu/A over the starter application alone, while Advance LCO applied in a 2X2 band increased yields by 9.1 bu/A. Repeated trials in 2011 at three locations (Schools, Sanford and Allensworth) indicated an 8 bu/a average yield increase from applications for Advance LCO applied with either an in furrow starter fertilizer or in a 2X2 with polyphosphate starter

Three large scale grower demonstration plots were established in 2012 at the Lewis Brothers Farm, Dutton, VA; Foster Farms, Columbia, NC and Liverman Farms in Tyrell Co., NC. Applications of Advance LCO were applied with a starter fertilizer in either a 2X2 band or an in-furrow application with a starter fertilizer and compared to starter fertilizer alone as a standard treatment. At the Liverman Farms Advance LCO was applied at 8 oz/A with 3 gal/acre Nachurs Ortho-phosphate 6-24-6. For all locations corn planting dates and treatments were applied according to customary cultural practices for each location and maintained throughout the growing season. Visual plant development evaluations were made between May 8th and May 18th, 2012 (data not shown). Yields were recorded at harvest. At the Lewis Farm, Advance LCO applied in a 2X2 in band increased yields by 10 bu/A. Two field locations were conducted at the Foster location where Advance LCO increased yields by an average 6 bu/A. Similar results were observed at the Liverman locations using Advance LCO + starter with a 10.96 bu/A yield increase over no starter.

Treatment 2010	Yield (bu/A)	Treatments 2011	Yield (bu/A)	Growers
Check(starter alone)	52.8	Infurrow starter alone	210	Schools
Advance LCO with starter(in furrow)	66.9	Infurrow starter with Advance LCO	215	
Check(starter alone)	88.7	Infurrow starter alone	220	Sanford
Advance LCO with starter (in furrow)	90.2	Infurrow starter with Advance LCO	224.9	
Check(starter alone)	222.9	2X2 poly starter alone	189.7	Allensworth
Advance LCO with starter(in furrow)	231.2	2X2 poly starter with Advance LCO	203.7	
Check(starter alone)	204.9			
Advance LCO with starter(2X2)	214			
Average Check yield 142.3bu/Acre				
Average Advance LCO yield 150.6bu/Acre				
8.3 bu/acre increase in 2010				

Treatment 2012	Harvested % Moisture	Test Weight	Yield @ 15%moisture	Grower
Starter 2X2	20%	na	140.00 bu/acre	Lewis
Starter 2X2 + Advance Lco	18.60%	na	150.00 bu/acre	Lewis
In Furrow Starter Test 1	na	na	189.31 bu/acre	Foster
In Furrow Starter with Advance LCO Test1	na	na	192.69 bu/acre	Foster
In Furrow Starter Test 2	na	na	162.95 bu/acre	Foster
In Furrow Starter with Advance LCO Test2	na	na	171.58 bu/acre	Foster
No Starter	19.90%	60 lb	190.66 bu/acre	Liverman
3 gal Ortho 6-24-6A + 8oz Advance LCO	18.90%	61 lb	201.62 bu/acre	Liverman
All rates are per acre calculations				

Advance LCO is a product of Coastal AgroBusiness, 3702 Evans Street, Greenville NC 27834