Asian pear trees are quite precocious and productive. Nine Asian pear cultivars namely ‘Hosui’, ‘Isilwase’, ‘Kosui’, ‘Olympic’, ‘Shinko’, ‘Ya Li’, ‘Yoinashi’, ‘Atago’, ‘Shinsui’, and two European pear cultivars ‘Golden Russett’, and ‘Bartlett’, were planted at the Chilton Research and Extension Center near Clanton in the spring of 2010 to field-test currently available fire blight tolerant Asian pear cultivars for their adaptation to Alabama conditions. The experiment is part of a multi-state replicated trial set in eight locations across the eastern United States to assess Asian pear cultivars potential for growers focused on producing sustainable fruit crops for local and regional markets. Trees began flowering and fruiting in their second leaf and measurements of fruit quality began in the third leaf. Tree survival varied considerably among cultivars. ‘Bartlett’ cultivar had lost all 5 trees planted, while 60 % of ‘Golden Russett’ trees had survived. Asian pear cultivars with better tree survival (80%) were ‘Kosui’, ‘Olympic’, and ‘Shinko’, while only 40% of ‘Ya Li’, ‘Yoinashi’, and ‘Atago’ trees survived. ‘Ya Li’ and ‘Olympic’ had the highest yield of 11.4 and 7.00 kg/tree respectively. ‘Kosui’ had the largest mean fruit size of 211 g. Studies continue to evaluate cultivar performance and Fire blight resistance to assess the best suited Asian pears for sustainable production in Alabama.