

Kuraray Poster Presentation Summary MBAO 2009
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TIF offers both extremely low fumigant vapor permeation and excellent film handling properties suitable for tractor application in narrow row mulch or wide broadcast fumigation. An early, yet-unpublished, highlight of the research conducted by Dr. Husein Ajwa of UC Davis in 2007 was that TIF reduced drip-applied chloropicrin peak and total emissions by about 85% compared to standard HDPE film. The advantages on fumigant vapor barrier of TIF versus VIF and standard tarp technologies versus various fumigants will be presented. In May 2009, the USEPA released the Amended REDs, where TIF with EVAL was approved for a 60% buffer zone credit for both methyl bromide and chloropicrin based on UC Davis film permeability testing of TIF that had been put through the rigors of field application using standard industry practices and equipment. Additional research in 2009 has focused on the fumigant dose response (application rate reduction potential) of TIF. Numerous trials in both the Western and Eastern US on a variety of crops have been done or are pending in collaboration with UC Davis, USDA/ARS, TriCal, Hendrix & Dail, and Raven Industries. One such trial already underway at the USDA/ARS research farm in Salinas involves Albion strawberries and is being supervised by Dr. Steve Fennimore of UC Davis. Rate reduction potential is being evaluated with treatments of 400, 300, 200, 100 and 50 lbs/acre of Pic-Clor60 (55.6% chloropicrin + 33% 1,3-dichloropropane) compared to a control dose of 350 lb/acre MBPic. Preliminary fruit yield, plant vigor and weed density data demonstrate that rate reductions under TIF are promising.