

REDUCTION OF METHYL BROMIDE DOSE APPLICATION IN DRIP IRRIGATION SYSTEM WITH TIF (TOTALLY IMPERMEABLE FILM) VS. STANDARD PE FILM IN STRAWBERRY.

Marcello D. Villahoz *; Luis Yokota **; Jose Shokida; Edgard Chow ^;**

*** Mitsui Plastics, Inc. Atlanta, GA 30342.**

**** Mitsui Argentina S.A.**

^ Kuraray America, Inc.

SUMMARY:

A field trial was conducted at a strawberry farm in Pilar, Buenos Aires, Argentina. The strawberry variety Aroma was transplanted into all plots with TIF and STD. The soil type was sandy loam, with a top horizon Type A, cohesive soil with an unconfined compressive strength of 80 cm and a horizon Type B with sandy clay type. Totally Impermeable Film (TIF) was compared with Standard PE Film (STD) under field conditions.

The area used in these field trials was 1,300 M² with 15 beds of 65 meters long by 1.30 meter wide. The thickness of the TIF and the STD films used in this field trial was of 35 microns and 25 microns respectively.

The application method used was drip fumigation. The fumigant used was 70/30 Methyl Bromide/ Chloropicrin. The fumigation rates used were 400 kg per ha in the control with STD vs. 200 kg per ha (50 % of the standard application in the TIF beds).

Fields with TIF and STD are periodically check for grow of weeds and mainly to be monitored the growth of plants. Main control will be production and see of strawberries yield and comparison between both groups. Field trial will continue till the end of the season December 2009.

Initially, NO plant or crop injury was observed, NO difference was observed between the normal dose of Methyl Bromide and the TIF with 50% of Methyl bromide application on plants.

In summary, we assume judging from the trials that the use of TIF could be one of solutions for reduction of Methyl Bromide application and are one of alternatives to reduce toxic emission gases.