

# Synthetic Film Mulches

Carlene A. Chase  
HOS 4932/6932

## Opaque Mulches: Susceptibility to nutsedge penetration



## Opaque Mulches - Black



## Opaque Mulches: Susceptibility to nutsedge penetration



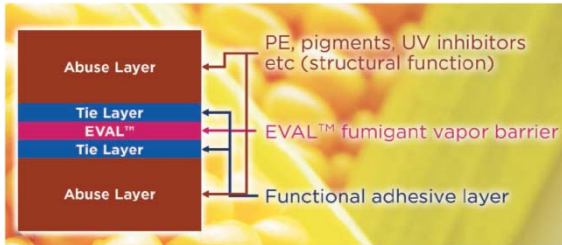
## Opaque Mulches: White-on-black mulch



## VIF – Virtually Impermeable Film



### TIF – Totally impermeable fim



### Metalized Mulch



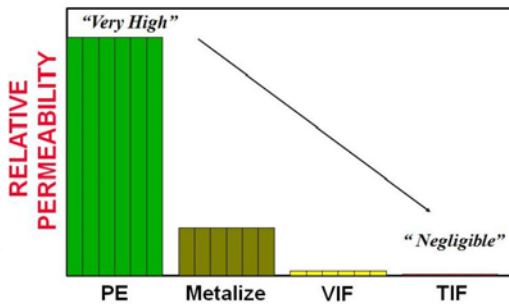
**YIELD AND WEED DENSITY OF TOMATO TRIALS BY VIRGINIA TECH WITH DMDS AND TIF**

| Treatment     | Marketable yield (lb/A) | Nutsedge/ft <sup>2</sup> |
|---------------|-------------------------|--------------------------|
| Untreated VIF | 19735 c                 | 23.8 a                   |
| Untreated VIF | 32501 b                 | 8.93 b                   |
| 20 GPA TIF    | 43772 ab                | 0.39 c                   |
| 30 GPA TIF    | 34727 b                 | 0.13 c                   |
| 40 GPA TIF    | 42616 ab                | 0 c                      |
| 50 GPA TIF    | 46331 ab                | 0 c                      |
| 60 GPA VIF    | 45429 ab                | 0.023 c                  |

### Red plastic mulch



### Relative permeability of fumigant gases through various plastic mulch films



### Transparent Mulch



Transparent mulch



Spunbonded landscape fabric



Infrared transmitting or wavelength-selective film



Tree well mulching with landscape fabric



Geotextile mulch

