HYTIBAR FLEX (VIF) FUMIGATION / MULCH FILM
REDUCES RATES AND INCREASES EFFICACY

Jim Ralles – Klerk's Plastics

In 1990, Klerk's Plastic Products produced its first "true barrier fumigation film" in response to Holland's ban on Methyl Bromide. This film is now called Hytibar Flex and in the US films of this type are referred to as Virtually Impermeable Films (VIF).

The permeability of MB through Hytibar is .083 mg/m2/h at 20 degree C. It is a 99.083 barrier. The film can be produced as thin as 1.2 mil for wide sheeting and 1.4 mil for row crop fumigation. Standard fumigation film is merely a screen to fumigants and its permeability has changed little since the early 50's when it was first used. Approximately 36% of Methyl Bromide gas escapes in the first 24 hours through standard fumigation film; 71% is gone within 5 days. A US standard to define a VIF needs to be established to protect consumers and guaranty uniform results.

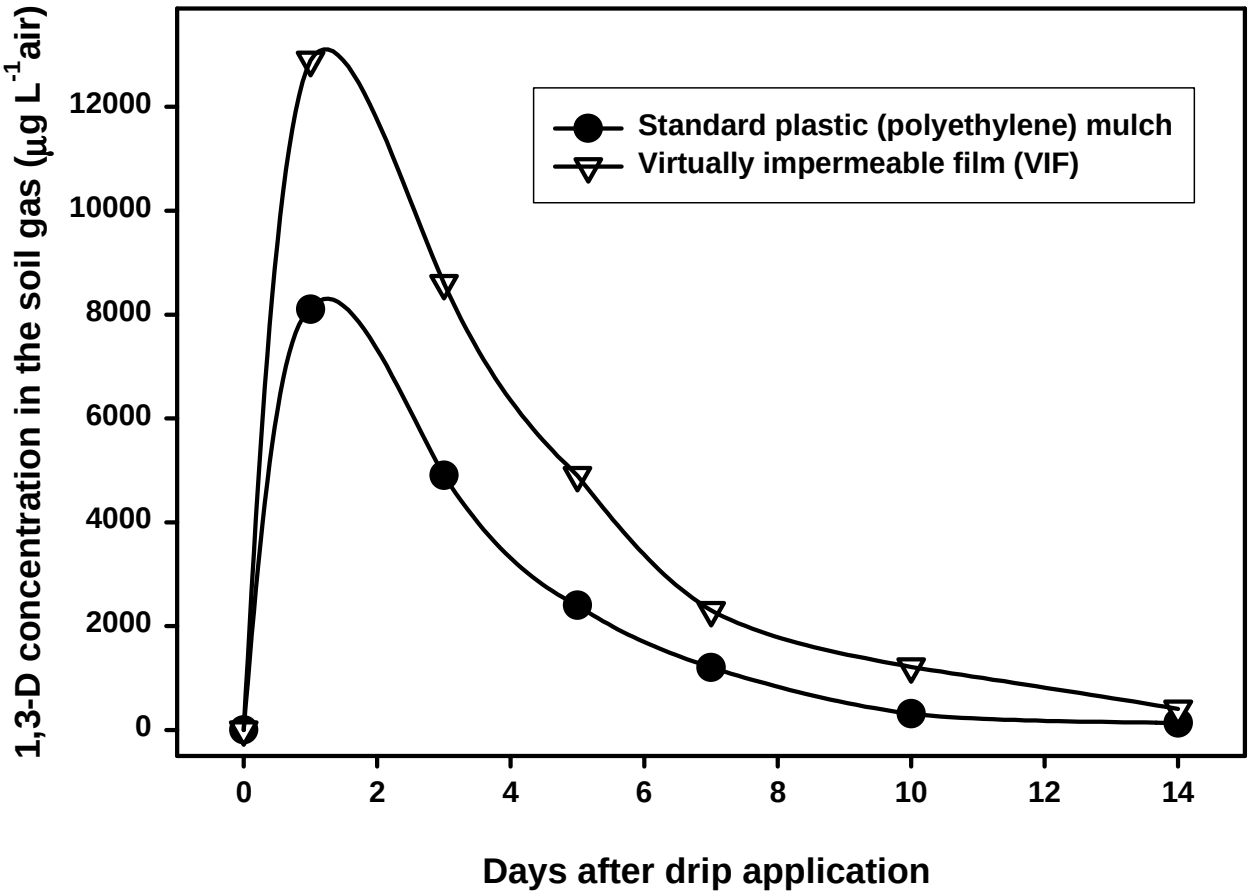
Since the 90's Hytibar has been sold extensively in Europe. Its use is now mandated for use with MB in at least two countries in Europe. In the US, University researchers and Agriculture Research Scientists are developing more efficient methods for using this film in conjunction with Methyl Bromide, 1,3-D InLine, Chloropicrin, Metam sodium and other alternative fumigants. The reduction in application rates combined with increased efficacy makes this type of film a true value.

Del Monte just finished field tests in Georgia that proved superior nutsedge control with Hytibar Flex versus normal film in conjunction with 1,3-D InLine at normal rates and MB at reduced rates. The test was conducted in a field with extreme nutsedge pressure. Similar tests are now underway in other South American Del Monte ranches.

This year, Florida farmers are reporting fumigation savings of $50 per acre over 2000 as a result of using reduced MB rates as low as 125 lb. per acre and Hytibar Flex. USDA, ARS research has proven excellent nutsedge control, depending on field pressure, with rates as low as 88 lb. per acre of 67/33 MB/Cp when Hytibar Flex is used.

In early 2000, Klerk's increased the mechanical properties of Hytibar Flex to a level sufficient to withstand the demands of the American farmer. This efficient barrier tarp with strength, colors, sizes and UV stability is now available to the US farmer. Hytibar Flex offers farmers the edge they need to maintain their well-deserved reputation as leaders in agricultural production while continuing their commitment to good stewards of the environment.

It's just good sense to use a true barrier film with volatile fumigants.



1,3-D concentration at 20 cm depth in the middle of soil bed covered with a standard plastic mulch or with VIF

Chart From "Distribution of Drip Applied Fumigants Under Various Conditions"
USDA-ARS, Water Management Research Laboratory, Fresno ,Ca
Husein Ajwa and Tom Trout

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