

## Evaluation of Methyl Bromide Alternatives for Strawberry in Florida and Spain

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Field trials were conducted in two locations in Huelva, Spain, and one in Florida, USA, to determine the effect of selected methyl bromide (MBr) alternatives on strawberry yield. As shown in Table 1, common treatments in both locations were: a) non-treated control, b) MBr + chloropicrin (Pic), c) 1,3-dichloropropene + Pic (Telone C-35, Telopic), d) Pic, e) dimethyl disulfide (DMDS) + Pic, and f) propylene oxide (Propozone). Dazomet (Basamid) was only tested in both Spaniard locations, whereas the combination of methyl iodide (MI) + Pic was used in Florida.

Table 1. Influence of methyl bromide (MBr) alternatives on strawberry yields. Huelva, Spain and Florida, USA. 2004-05.

Treatment	Rate (kg/ha of treated area)	Method of application	Mulch Type	Marketable yield (t/ha) *
<b>Huelva, Spain</b>				
Control	0	---	Black LDPE	46.6 c
MBr + Pic (50/50)	400	4 chisels in bed	Black VIF	66.5 a
Basamid	400	Rototilled	Black VIF	60.2 b
Telopic	300	4 chisels in bed	Black VIF	70.2 a
Pic	300	4 chisels in bed	Black VIF	68.8 a
DMDS + Pic	250 + 250	4 chisels in bed	Black VIF	71.5 a
Propozone	550	4 chisels in bed	Black VIF	59.9 b
<b>Florida, USA</b>				
Control	0	---	Black LDPE	9.2 c
MBr + Pic (67/33)	400	3 chisels in bed	Black LDPE	12.0 bc
MBr + Pic (67/33)	310	3 chisels in bed	Black VIF	17.1 a
Telone C-35	300	3 chisels in bed	Black VIF	16.3 a
MI + Pic (50/50)	230	3 chisels in bed	Black VIF	10.9 c
Pic	300	3 chisels in bed	Black VIF	14.7 ab
DMDS + Pic	250 + 250	3 chisels in bed	Black VIF	15.4 a
Propozone	500	3 chisels in bed	Black VIF	16.6 a

\*Treatments followed by the same letter do not differ at the 5% significance level, based on Fisher's protected LSD test.

The results showed that Telone C-35 (Telopic), DMDS + Pic, and Pic consistently had similar marketable yields as MBr + Pic. Similar results were found in Florida, USA, with the exception of propylene oxide, which had equal marketable fruit weight as MBr + Pic.