

中科瑞泰(北京)生物科技有限公司 Tel: 400-699-0631

http:// <u>www.real-tims.com.cn</u> E-mail: <u>real-times@vip.163.com</u>

Methyl Jasmonate

茉莉酸甲酯/茉莉酮酸甲酯 MeJA

3-Oxo-2-(2-pentenyl)cyclopentaneacetic acid, methyl ester;

Methyl 3-oxo-2-(2-pentenyl)cyclopentane acetate

C13H20O3 MW 224.3 CAS: 39924-52-2

Sotrage:
RT; Protect from light and moisture

COOCH,

Specifications:

Appearance.....colorless to pale yellow liquid

Density.....1.03 g/mL at 25 °C

GC Purity (sum of isomers)......>95%

Soluble.....soluble in ethanol to 30mg/ml

• Introduction:

Methyl jasmonate (MeJA) is a substance used in plant defense and many diverse developmental pathways such as seed germination, root growth, flowering, fruit ripening and senescense. MeJA can induce the plant to produce multiple different types of defense chemicals such as photoalexins (antimicrobial), nicotine or proteinase inhibitors.

MeJA has been used to stimulate traumatic resin duct production in lodgepole pine trees. This can be used as a defense against many insect attackers as a type of vaccine.

MeJA is also a plant hormone involved in tendril (root) coiling, flowering, seed and fruit maturation. An increase of the hormone affects flowering time, flower morphology and the number of open flowers. MeJA induces ethylene-forming enzyme activity, which increases the amount of ethylene to the amount necessary for fruit maturation.

MeJA is also used as a cancer treatment in humans. Methyl jasmonate induces cytochrome c release in the mitochondria of cancer cells leading to cell death, but does not harm normal cells.

● 茉莉酸甲酯母液配制方法:

100 mM (**22 mg/ml**)母液配制: **10 µl** 茉莉酸甲酯原液加到 **465 µl** 无水乙醇 中, **0.22 µm** 抽滤除菌, **-20**℃保存。