

ethylene but can be potentially decreased by the ethylene inhibitor 1-MCP. 'CheonHong' nectarines (*Prunus persica*) were treated with 1 μ L L⁻¹ of 1-MCP at 10°C for 24h and transferred in storage room at 0°C and 20°C. Ethylene production and respiration rates treated by 1-MCP were not significantly lower than those of control throughout the storage period. There was no significant difference in quality between Control and 1-MCP treated nectarine as to the hardness, soluble solids contents, titratable acidity and other parameters tested. Consequently 1-MCP could not increase shelf-life of 'CheonHong' nectarine.

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Effect of 1-MCP(1-Methylcyclopropene) on the quality and shelf life of 'Formosa' Plums (*Prunus salicina* L.)

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Newly harvested 'Formosa' plums were treated with 1-MCP (1 μ L L⁻¹ for 24 hours at 10°C) before storage to extend shelf life at 0°C and 20°C. Ethylene production and respiration rates of 'Formosa' plums treated with 1-MCP were significantly lower than those of 'control' throughout the storage period. Also, 1-MCP maintained firmness, titratable acidity, colour changes and softening of 'Formosa' plums. Shelf life of 'Formosa' plums could be extended 5-7 days at 20°C and two weeks at 0°C by 1-MCP treatment. 1-MCP was effective in maintaining quality and can be regarded as a useful tool in extending shelf life of 'Formosa' plums.

P1-14

포장김치의 잠열재를 이용한 택배형 아이스박스 내에서 온도 유지 및 품질특성

권기현, 정진웅, 김종훈, 김병삼, 이현석

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농산물의 유통·물류산업의 외형적인 성장과는 달리 콜드체인 시스템은 아직 도입단계에 머물고 있으며 쇼-케이스나 업소용 냉동·냉장고 등에서 차이가 있어서 선진국형의 콜드체인 시스템과는 차이가 있는 실정이다. 따라서 본 연구의 목적은 농산물 품목별 설정온도에 필요한 잠열재를 이용하여 농산물의 초기의 품질을 유지하면서 일반 아이스박스과 택배형 아이스박스에 포장된 김치를 저장하여 잠열재, 이동식 보냉고 내부, 김치포장용기내부, 외기등의 온도변화 및 품질특성을 살펴보았다.

PCM 팩 축방냉 후 일반 아이스박스과 본 연구에서 개발한 택배형 아이스박스에 PCM팩을 설치