ETHYLENE TREATMENT ON RIPENING OF 1-MCP TREATED PEAR AFTER COLD STORAGE

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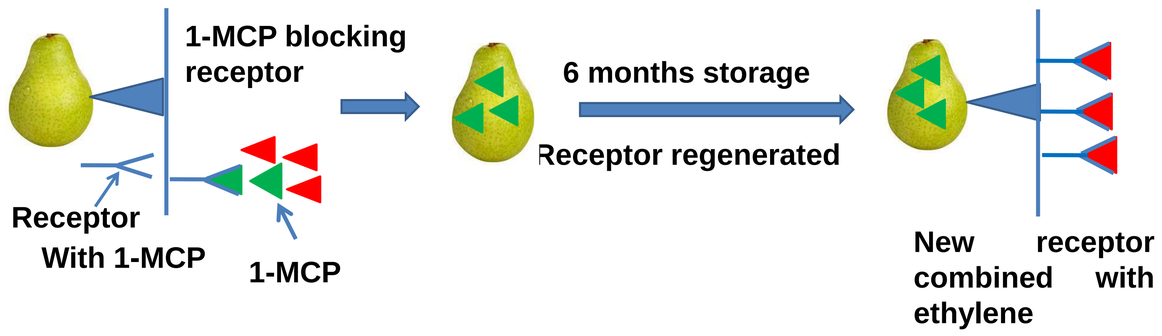
1. Case study

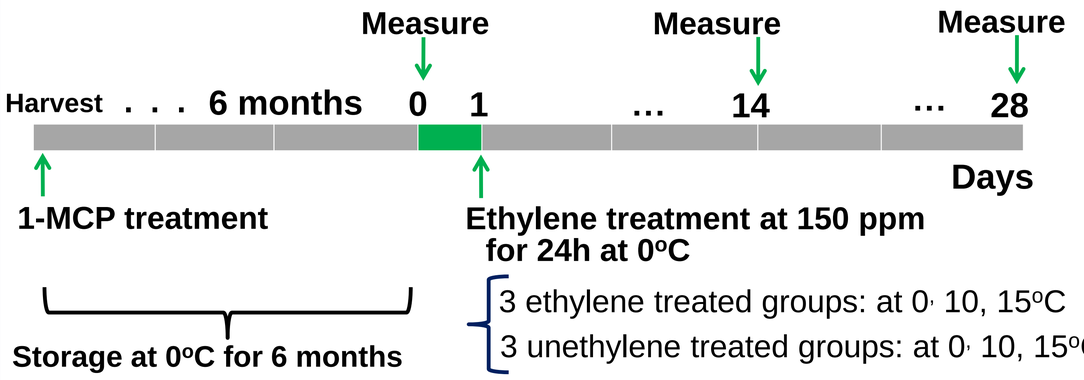
Pears were a kind of fruit for long storage. However, pears treated with 1-MCP usually do not resume even ripening after cold storage.

Evaluating the effectiveness of ethylene treatment on 1-MCP treated pears stored for 6 months at 0°C .

2. Methods



3. Experimental design



4. Measurement

Storage at 0, 10, 15°C → Measurement

Treating with ethylene 150ppm

- Acoustic firmness
- Surface color
- Chlorophyll fluorescence
- Brix
- Ethylene production
- CO_2 production

5. Results

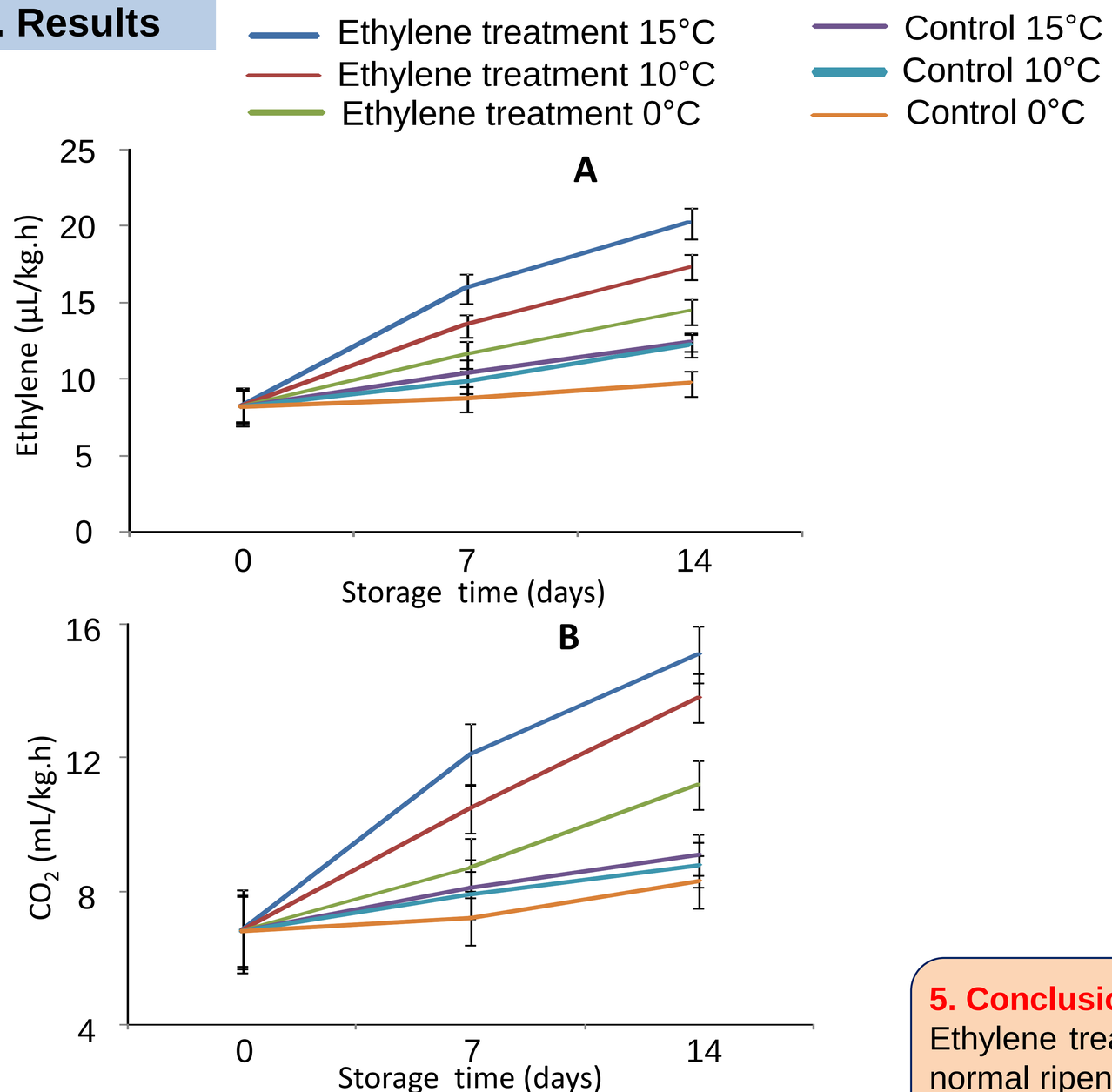


Fig 1. Ethylene production (A) and CO_2 production (B) during storage

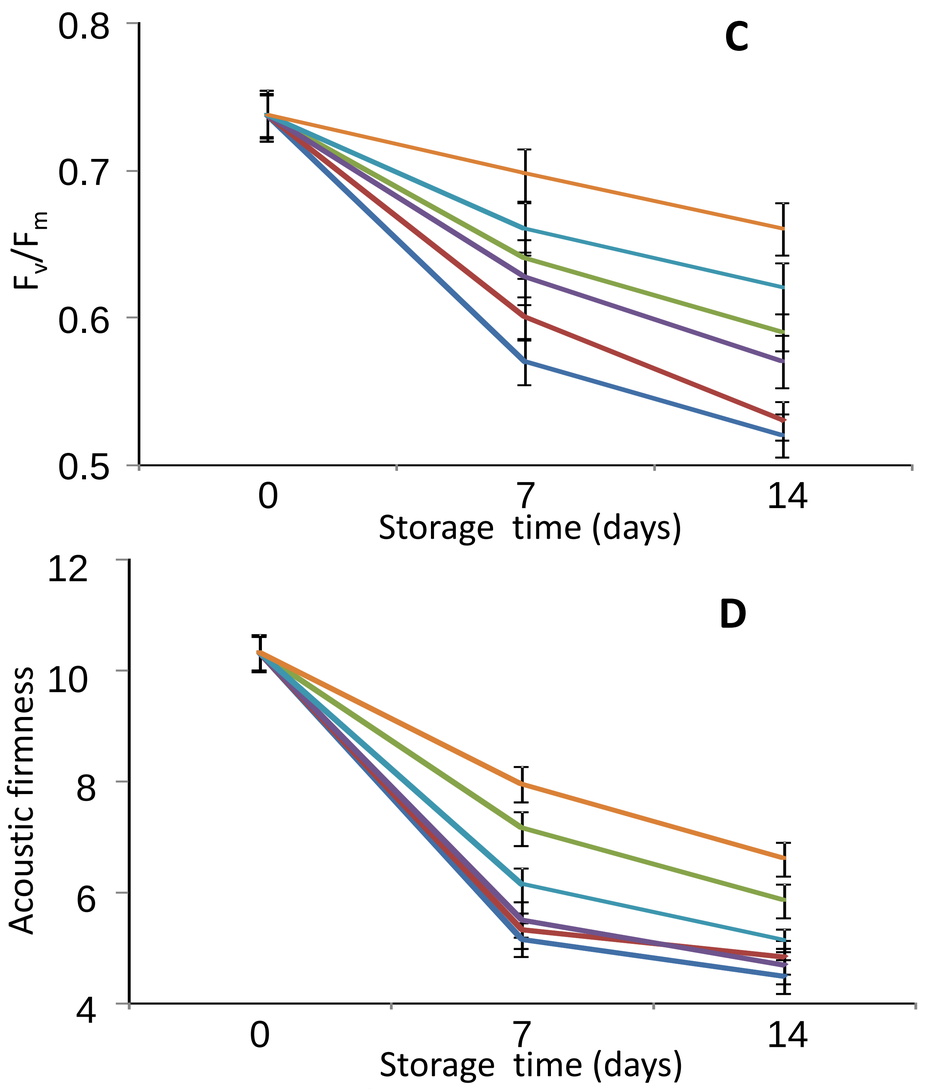


Fig 2. Fv/Fm parameters (C) and acoustic firmness (D) during storage

5. Conclusion

Ethylene treatment after 6 months of storage at 0°C could resume the normal ripening of pear compared to untreated fruits. Low temperatures slowed the ripening of pears after ethylene treatment.