

**Title** Implementation of a demonstration project on alternatives to methyl bromide for the treatment of high moisture dates (Algeria and Tunisia): the UNIDO's experience

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**Citation** ISHS Acta Horticulturae 882:577-579. 2010.

**Keyword** methyl bromide, pest; fruit quality

### **Abstract**

In Decision XV/12, the Parties to the Montreal Protocol recognize the risk of potential non-compliance vis a vis the agreed phase-out schedule for those A5 countries that rely on the use of Methyl Bromide (MB) to stabilize and disinfest high moisture dates at time of harvest. Indeed, up to now, the Methyl Bromide Technical Option Committee of TEAP has not been able to identify feasible alternatives to replace the use of this fumigant in the specific sector of high-moisture dates (see 2006 MBTOC Assessment report, 2008 TEAP progress report). UNIDO took the initiative to respond to Decision XV/12 and a project proposal was designed to demonstrate the feasibility of alternatives to MB for the post-harvest treatment of high moisture dates. The objective of the project is to demonstrate whether alternatives to MB for the treatment of high moisture dates are technically and economically available in Algeria and Tunisia as well as in similar conditions and circumstances. A preliminary investigation of potential pest control techniques was launched. Five alternatives were tested in 2008 in a small-scale laboratory test in France, using 'Deglet Nour' from Biskra, Algeria. The tests have been conducted with limited replicability and with limited control on efficacy and effect on fruit quality. Furthermore, the environmental conditions were different from the conditions that might be expected in north African countries at the time of treatment. Despite the fact that the test provided interesting technical information, it should be considered of limited scientific value. UNIDO presented the results of that preliminary investigation holding a technical workshop on the replacement of methyl bromide for the disinfestation of high moisture dates in Vienna (16-17 April 2009). For the time being, two alternatives have been considered promising for the full scale tests: phosphine without ammonia and high temperatures. The full scale demonstration will be designed to assess the efficacy of the two alternatives on all the live stages of pests (in particular on eggs of *Lepidoptera*) and to assess the effect on fruit quality. Experience has shown that full involvement of local experts and expertise is needed for the successful preparation, design and implementation of the activities.