

**Working Group on Biochemical and Molecular Techniques
and DNA-Profiling in Particular**

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A SIMPLE SSR BASED IDENTIFICATION SYSTEM FOR SWEET POTATO

Document prepared by an expert from the United Kingdom

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A DNA based fingerprinting method was developed for the differentiation of varieties of sweet potato based on the use of 14 SSR markers. Markers were selected from publicly available sources and screening against commercially available varieties sold in UK supermarkets. A final set of 14 SSR markers were selected that were informative and compatible for use in four multiplex reactions. Reference and candidate varieties from DUS testing of sweet potato in Ireland were then tested to ascertain if this method could be a useful aid to DUS testing of sweet potato. All varieties examined could be differentiated using this method with only two unexpected results. Extensive testing of commercial samples from UK supermarkets showed that for the most part varietal labelling of fresh material was accurate.

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