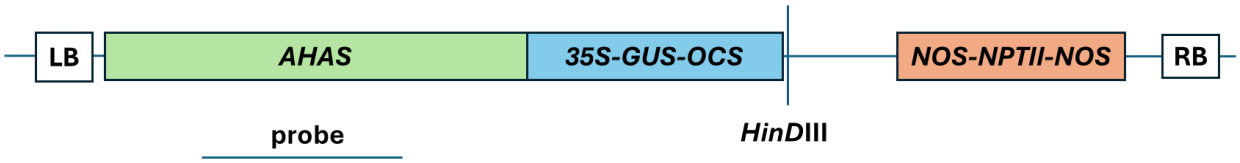
Supplementary file

Conner and Jacobs 'Inducing fixation of transgenic alleles in open-pollinated populations'.

A. The T-DNA region of pKIWI110 showing the left border (LB), right border (RB), a 5.8 kb *Xba*I fragment from *Arabidopsis thaliana* with an intact acetohydroxacid synthase gene conferring resistance to sulfonylurea herbicides (AHAS), a β-glucuronidase reporter gene (*35S-GUS-OCS*), and a selectable marker gene conferring kanamycin resistance (*NOS-NPTII-NOS*). Also shown are the *Hin*DIII restriction site and the position of the 2.2 kb probe used for Southern analysis.

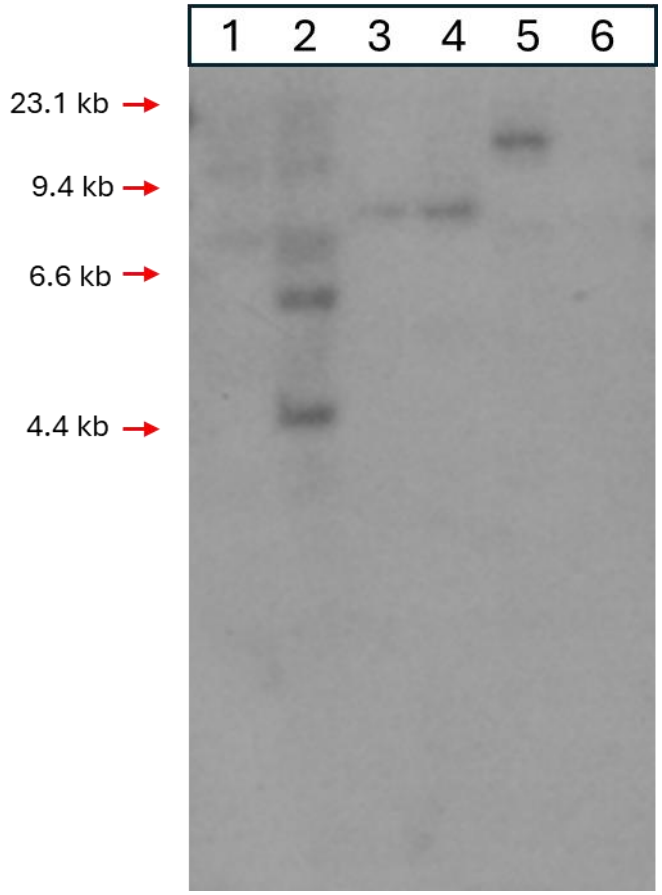


B. Southern analysis of potato plants transformed with pKIWI110. Genomic DNA was isolated following the procedure of Murray and Thompson (Rapid isolation of high molecular plant DNA. Nucleic Acids Res. 8: 4321-4326, 1980) and digested with *Hin*DIII that restricts only once within the pKIWI110 T-DNA. Approximately 10 µg of restricted DNA was loaded per lane on a TAE-buffered 0.8% agarose gel. Following separation of fragments, the DNA was transferred to a nylon membrane (Zetaprobe, Bio-Rad) and probed with a 2.2 kb fragment from AHAS gene labelled with ^{32}P using the DNA labelling system (Amersham, Little Chalfont, U.K.). Autoradiography was performed by exposing the membranes to XAR-5 film (Kodak) at -70 °C with intensifying screens. The probe should detect a single band of variable length for each insertion event.

Lanes 1-5 represent five independent transformation events of potato cultivar 'Iwa', with lane 6 representing the non-transformed 'Iwa' control.

Lane 1	SCI1 (possibly two copies at 17.5 and 8.5 kb)
Lane 2	SCI2 (at least 3 copies at 7.6, 6.3, 4.8 kb)
Lane 3	SCI3 (one copy at 9.0 kb)
Lane 4	SCI4 (one copy at 8.8 kb)
Lane 5	SCI5 (one copy at 19.5 kb)
Lane 6	Wild-type control

Line SCI4 with one intact insertion of the T-DNA was used in this study.


1 2 3 4 5 6
23.1 kb
9.4 kb
6.6 kb
4.4 kb