Supplementary Materials

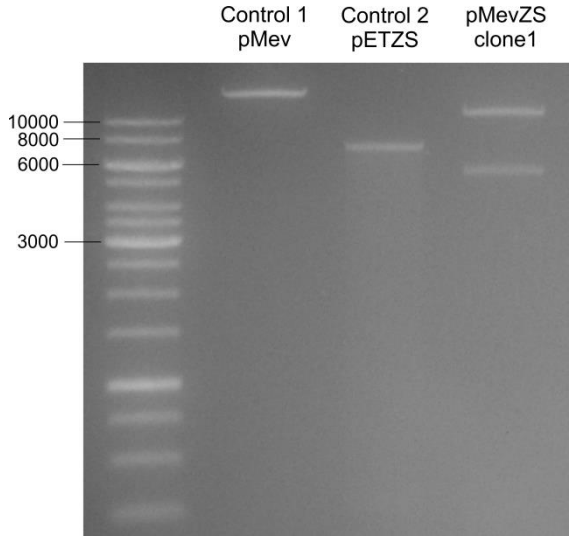


Figure S1. Confirmation of the cloning of the pMevZS by restriction digestion with BglII. Controls shows only one fragment with the respective backbone sizes: pMev 13.1 kb and pETZS 7.3 kb. The vector pMevZS contains two fragments of 5.3 kb and 9.8 kb resulting in a final size of 15.1 kb.

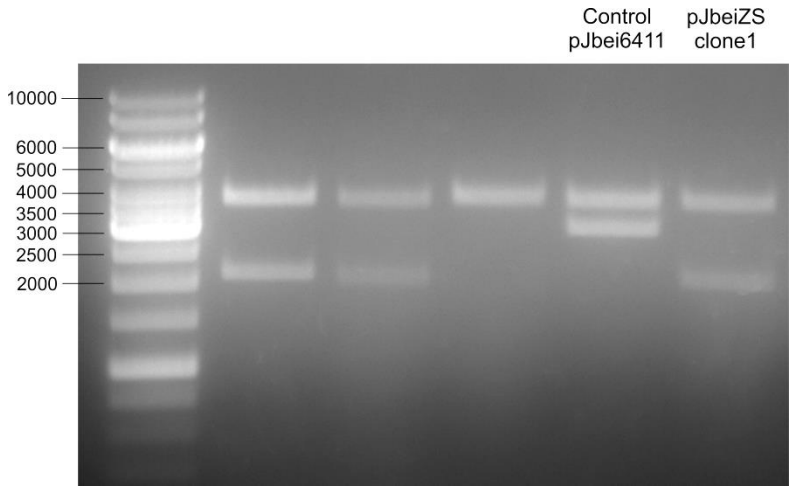
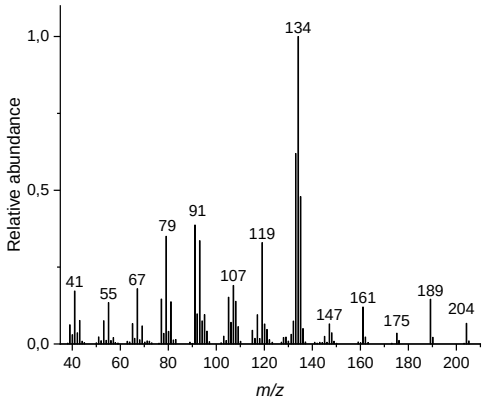
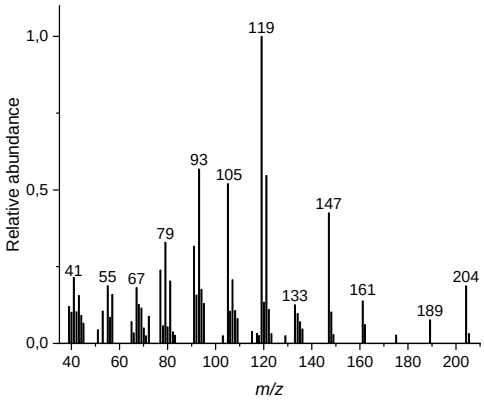
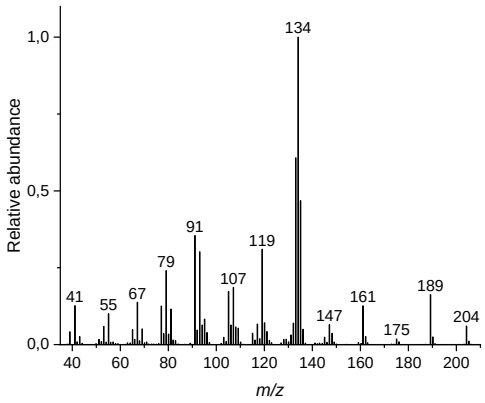
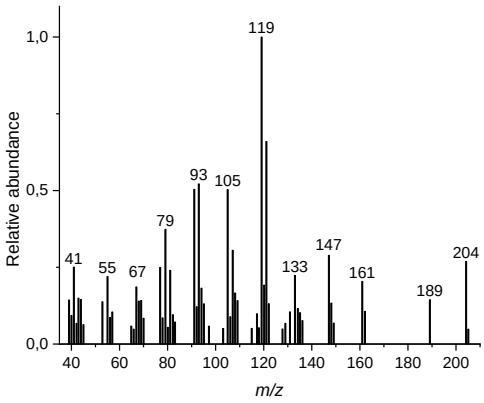
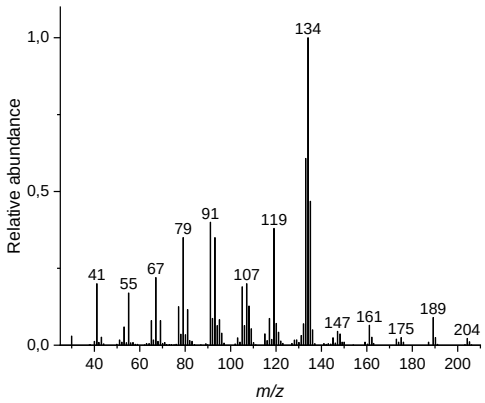
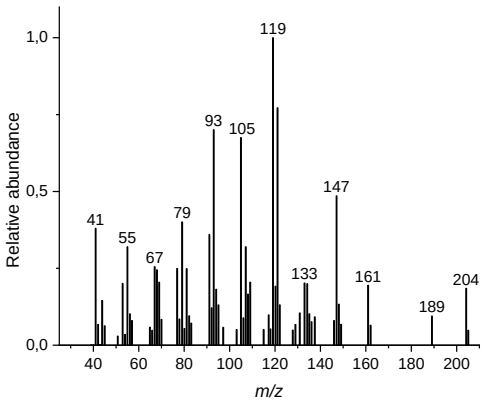


Figure S2. Confirmation of the seamless cloning of the pJbeiZS by double restriction digestion with BglII and XhoI. Vector pJbeiZS shows the 4 kb pJbei6411backbone and the 2 kb insert *ZS* gene. Similar digestion of control vector pJbei6411 appears with similar backbone size and with an insert cassette of 3 kb consisting of the cytochrome P450 operon (*ahpG*, *ahpH* and *ahpI* genes).

Table S1. Comparison of mass spectra and retention indices (RI) between the *in vivo* production of sesquiterpenes ((+)-zizaene and β-acoradiene) and references: authentic sesquiterpenes from the vetiver oil and database references.

(+)-zizaene	β-acoradiene
	
(+)-zizaene from *in vivo* production system RI: 1617	β-acoradiene from *in vivo* production system RI: 1670
	
(+)-zizaene from authentic standard from the vetiver oil. RI: 1617	β-acoradiene from authentic standard from the vetiver oil. RI: 1670
	
(+)-zizaene from database reference. RI: 1620 (Martinez et al., 2004)	β-acoradiene from database reference. RI: 1672 (Martinez et al., 2004)