Monoterpenes (C_{10} isoprenoids) are the main components of essential oils and are possible precursors for many commodity chemicals and high energy density fuels. Monoterpenes are synthesized from geranyl diphosphate (GPP), which is also the precursor for the biosynthesis of farnesyl diphosphate (FPP). FPP biosynthesis diverts the carbon flux from monoterpane production to C_{15} products and quinone biosynthesis. In this study, we tested a chromosomal mutation of Escherichia coli's native FPP synthase (IspA) to improve GPP availability for the production of monoterpenes using a heterologous mevalonate pathway. Monoterpane production at high levels required not only optimization of GPP production but also a basal level of FPP to maintain growth. The optimized strains produced two jet fuel precursor monoterpenoids 1,8-cineole and linalool at the titer of 653mg/L and 505mg/L, respectively, in batch cultures with 1% glucose. The engineered strains developed in this work provide useful resources for the production of high-value monoterpenes.