SUPPLEMENTAL DATA LEGENDS

Supplemental Figure 1. Reversed-phase HPLC profiles of extracts from yeast cells expressing GhFNSII, MtFNSII-1 or MtFNSII-2. Partial HPLC chromatograms show the production of dihydroxflavone (DHF) from liquritigenin (Liq) by GhFNSII, MtFNSII-1 and MtFNSII-2. Yeast cells expressing MtFNSII-1 or MtFNSII-2 produced an unknown peak (Rt =11.75 min) not seen in GhFNSII reactions.

Supplemental Figure 2. LC-MS analysis confirms the identity of unknown peak produced from liquiritigenin as 2-hydroxyliquiritigenin. Upon LC-MS analysis, liquiritigenin produce a molecular ion of m/z^+ 256 and product ions m/z^+ 137 and m/z^+ 119 (A) whereas the unknown product produce a molecular ion of m/z^+ 273 and product ions of m/z^+ 137 and m/z^+ 121 (B). Proposed sites of fragmentation indicate on the structure diagrams of liquiritigenin (A) and the unknown product (B) indicate that the unknown product is 2-hydroxyliquiritigenin (See text for details).

Supplemental Figure 3. MtFNSII-1 or MtFNSII-2 converts flavanones into 2-hydroxyflavanones and not flavones. *In vitro* assays using microsome preparations from yeast cells expressing MtFNSII-1 show the conversion of naringenin into 2-hydroxyflavanone. The product of apigenin is hardly detectable. Diamonds represent 2-hydroxy-naringenin, Squares represents apigenin.

Supplemental Figure 4. Real-time RT-PCR analyses of MtFNSII-1 (CYP93B10) and MtFNSII-2 (CYP93B11) expression in treatment with *S. meliloti*.

Supplemental Table 1. PCR primers used in this study.