Pol II primers for bees (9/19/2006)

Forward Primers:
\textbf{polfor1} \quad 5' -- CGT ACT GTY ATY ACW CCY GAT CC --3'  
[23 mer, \textit{Tm} = 55.8C]

\textbf{polfor2} \quad 5' -- TGG GAY GSY AAA ATG CCK CAA CC --3'  
[23 mer, \textit{Tm} = 61.6C]

\textbf{polfor2a} \quad 5' -- AAY AAR CCV GTY ATG GGT ATT GTR CA --3'  
[26 mer, \textit{Tm} = 58.0C]

\textbf{polfor3} \quad 5' -- CAR GTT ATY GCT TGT GTS GCY CAA C --3'  
[25 mer, \textit{Tm} = 59.6C]

Reverse Primers:
\textbf{polrev1} \quad 5' -- CAA ATA TGM AGY ART GAH CCR GCW G --3'  
[25 mer, \textit{Tm} = 57.0C]

\textbf{polrev2} \quad 5' -- TTY ACA GCA GTA TCR ATR AGA CCT TC --3'  
[26 mer, \textit{Tm} = 55.5C]

\textbf{polrev2a} \quad 5' -- AGR TAN GAR TTC TCR ACG AAT CCT CT --3'  
[26 mer, \textit{Tm} = 57.0C]

\textbf{polrev3} \quad 5' -- GAA ARA TCT TYT GYA CGT TGG ADA TC --3'  
[26 mer, \textit{Tm} = 54.3C]

PCR conditions

\textbf{polfor1} to \textbf{polrev1} \quad 94 C, 1min; 52 C, 1min; 72 C, 1min; 35 cycles
Produces a roughly 900bp fragment

\textbf{polfor2} to \textbf{polrev2} \quad 94 C, 1min; 52 C, 1min; 72 C, 1min; 35 cycles
Produces a roughly 800bp fragment.

\textbf{polfor2a} to \textbf{polrev2a} \quad 94 C, 1min; 52 C, 1min; 72 C, 1min; 35 cycles
This is the best \textit{pol II} primer pair. It works on a wide variety of taxa and produces a sharp, bright band of roughly 700 bp.

\textbf{polfor3} to \textbf{polrev3} \quad 94 C, 1min; 52C, 1min; 72 C, 1min; 35 cycles
Produces a roughly 600bp fragment. PCR products are faint and difficult to purify for sequencing.