$$
\begin{aligned}
\frac{dL(t)}{dt} &= -\alpha_L L + \beta_L \left[P \left(1 - \left(\frac{P}{\gamma_L} \right)^2 \right) + A_P \right] \\
\frac{dP(t)}{dt} &= -\alpha_P P(t) + \beta_P \left[L + \frac{A_L}{1 + \delta_P I_P} \right] \\
\frac{dI_P(t)}{dt} &= -\epsilon[-I_P + \mu P]
\end{aligned}
$$