NO.

DATE . . ( )

$$\chi(C_\lambda) = \chi(\tilde{C}_\lambda) = -2.$$

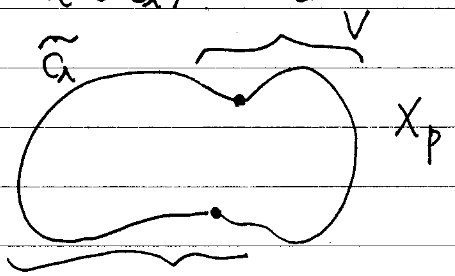
Pf By P498, $\tilde{C}_\lambda \xrightarrow{\pi} H_\lambda \cap S$ is the desingularization.
By the classical Plücker formula,

$$g(H_\lambda \cap S) = 3 - \underset{\#\text{ of double points}}{\underset{\shortparallel}{1}} = 2.$$

$\Rightarrow$ By the definition on P500, $g(H_\lambda \cap S) = g(\tilde{C}_\lambda) = 2$
By the result on P508, if $\pi : \tilde{C}_\lambda \longrightarrow H_\lambda \cap S$ is a desingularization, then

$$\begin{aligned}
\chi(H_\lambda \cap S) &= \chi(\tilde{C}_\lambda) - {}^{\#}(\pi^{-1}(p) - 1) \\
&= \chi(\tilde{C}_\lambda) - (2-1) = \chi(\tilde{C}_\lambda) - 1 \\
&= \chi(\text{a smooth quartic}) + 1 \\
&= -4 + 1 = -3 \quad \text{by the note on P920}
\end{aligned}$$

$\Rightarrow$ $\chi(\tilde{C}_\lambda) = -2$



$$H_2(\tilde{C}_\lambda) \oplus H_2(X_p)$$

$$\begin{array}{ccccccc}
H_2(U \cap V) & \longrightarrow & H_2(U) \oplus H_2(V) & \longrightarrow & H_2(U \cup V) & \longrightarrow & H_1(U \cap V) \longrightarrow \\
\shortparallel & & \shortparallel & & \shortparallel & & \shortparallel \\
0 & & H_2(\tilde{C}_\lambda) \oplus H_2(X_p) & & H_2(C_\lambda) & & 0
\end{array}$$

$$\begin{array}{ccccc}
H_1(U) \oplus H_1(V) & \longrightarrow & H_1(U \cup V) & \longrightarrow & 0 \\
\shortparallel & & \shortparallel & & \\
H_1(\tilde{C}_\lambda) \oplus H_1(X_p) & & H_1(C_\lambda) & &
\end{array}$$

$\Rightarrow$ $H_2(C_\lambda) = H_2(\tilde{C}_\lambda) \oplus H_2(X_p)$ and $H_1(C_\lambda) = H_1(\tilde{C}_\lambda) \oplus H_1(X_p)$.