

His formula is correct for  $h \neq 0$ . If unify both cases ( $h = 0$  and  $h \neq 0$ ) and simplify the expression the final value of Gamma is the following:

$$\Gamma = \frac{2e^{-r_f \tau}}{x\sigma\sqrt{\tau}} n(b_1) - \phi\eta e^{-r_a \tau} \left(\frac{x}{K}\right)^{-h} \frac{1-h}{x} N(-\phi\eta(b_1 - h\sigma\sqrt{\tau})). \quad (1)$$

So, the only missprint in Your formula is that the emphasized (with red color above) factor is missing.