This talk is concerned with a class of reaction diffusion equation with spatio-temporal delays. When the reaction function of this equation is nonlinear without monotonicity, it is shown that there exists a spreading speed \( c^* > 0 \) for this equation such that \( c^* \) is linearly determinate and coincides with the minimal wave speed of traveling waves, and that this equation admits a unique traveling wave (up to translation) with speed \( c > c^* \) and no traveling wave with \( c < c^* \). (Received September 21, 2015)