COVID19 SIR MODEL

(MOZAMBIQUE DATAS)

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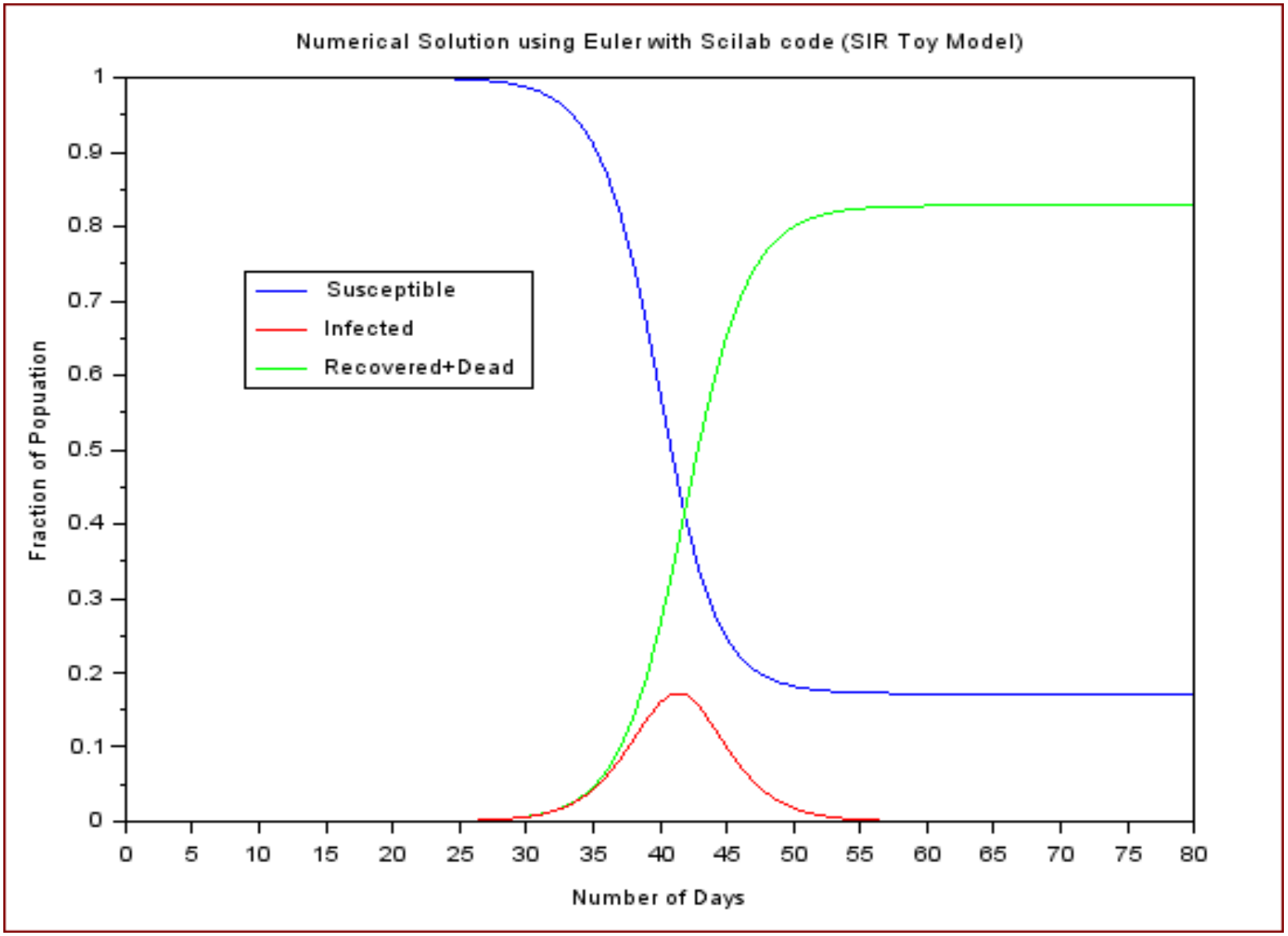
The SIR in Mozambique

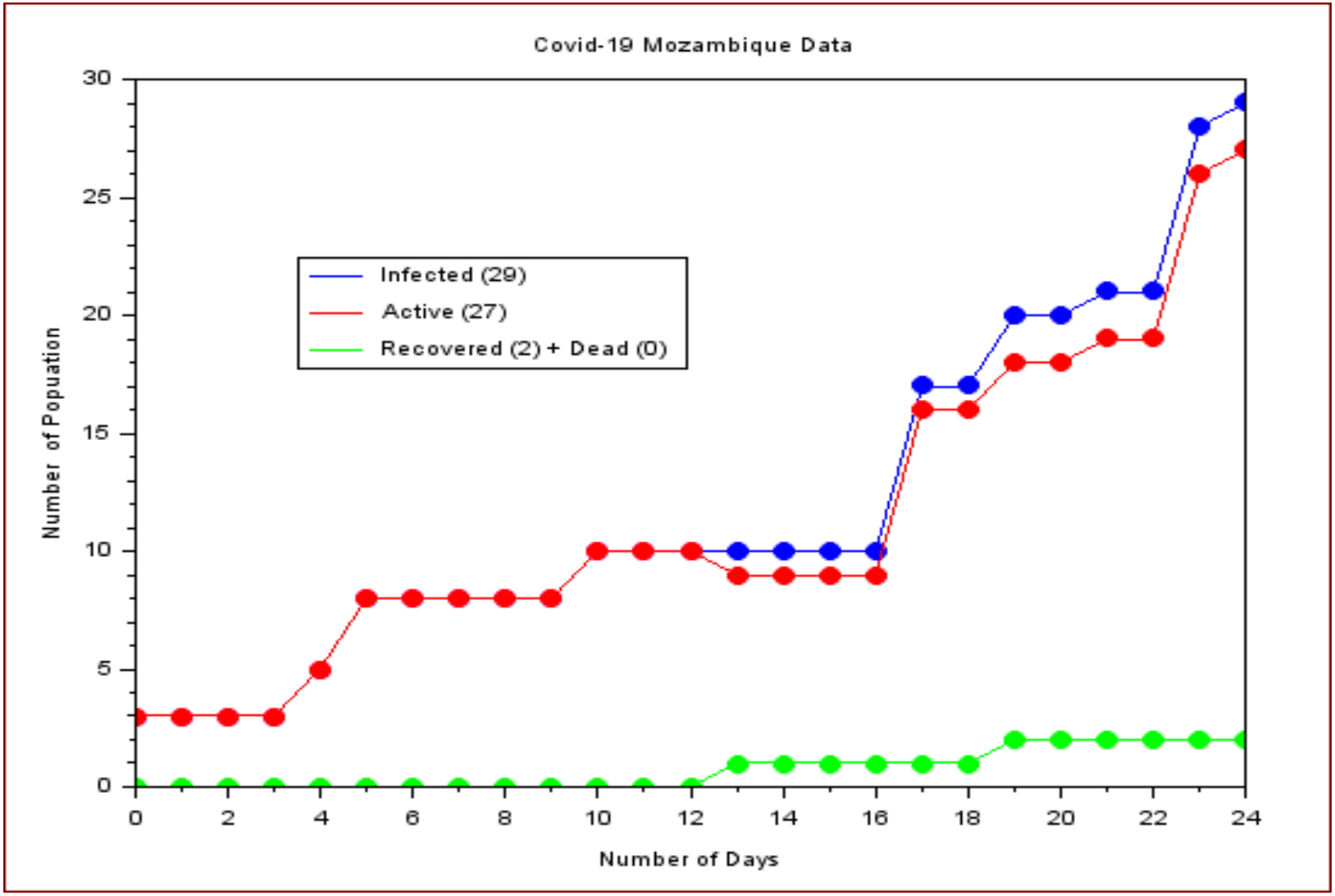
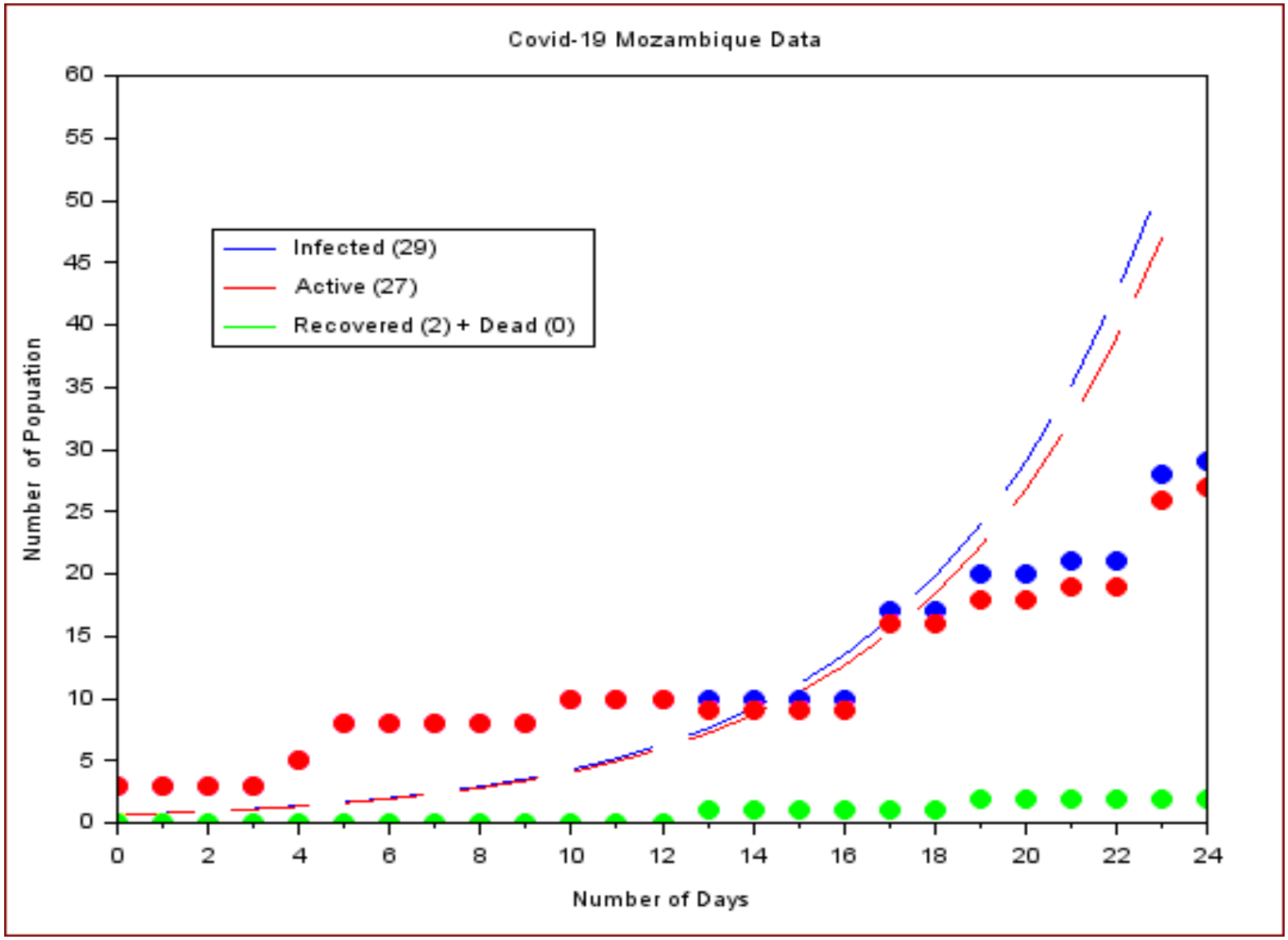
- *In Mozambique , we are **20 million s** of population, so:*
- ***Initial condition:***
- $N = S(0) = 2 * 10^7$
- $I(0)=1$
- $R(0)=0$

- $\frac{ds(t)}{dt} = -bs(t)i(t)$ $\quad s(0) = 1$
- $\frac{dr(t)}{dt} = ki(t)$ $\quad r(0) = 0$
- $\frac{di(t)}{dt} = bs(t)i(t) - ki(t)$ $\quad i(0) = 5 * 10^{-8}$
- I solve the equations with method of **euler with scilab code**

Ploting of the sulution system of equations



Acumulative cases



Acumulative cases