Priors_SC

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Générer des paramètres (Priors)

Ce script permet de générer des priors pour le modèle Démographique SC selon des distributions uniforme ou log-uniforme

```
library(stats)
library("KScorrect", lib.loc="~/R/x86_64-pc-linux-gnu-library/3.3")
######partie locus
#variables locus
#-L=taille du gene
#-t=theta
#-r=rho
#-delta=taille du track recombinant
#boucle de 1000000 iterations(1000000 tirage demographique)
demo<-NULL
locus<-NULL
tbs<-NULL
#####TIRER un prior locus dans une distribution uniforme de bornes
L<-scan("/home/kadurand/partage_windows/Xylella/analyses_genomiques/ABC/1368oRTHOLOGUES_summarystats/le
t<--runif(1368,0, 0.001)#bound_theta=[0-0.0003]bornes vrai pour 13pauca_multiplex augmenter la borne su
r<-runif(1368,0,0.001)#bound_theta=[0-0.0003]bornes vrai pour 13pauca_multiplex augmenter la borne sup
delta<-round(runif(1368,10, 1000))#bound=[10-1000]
#print(L,t,r,delta)
m_locus=matrix(c(L,t,r,delta),ncol=4)
m_locus=as.data.frame(m_locus)

for (i in 1:10000){#tirage des priors demographiques
  #variables demographique modéle SC
  ##Param_demo (7) =  Ts,  N1,  N2,M12, M21, Tsc, T1,
  Ts<-rlunif(1,100,1E+8)#bound=[1,100,1E+8]
  N1<-rlunif(1,100,1E+6)#bound=[100,1E+6]
  N2<-rlunif(1,100,1E+6)#bound=[100,1E+6]
  Na<-rlunif(1,100,1E+6)#Bound=[100,1E+6]
  M12<-runif(1,0.01,30)#bound=[0.01-30]
  M21<-runif(1,0.01,30)#bound=[0.01-30]
  Tsc<-rlunif(1,10,Ts)#bound=[0-100]borne sup <Ts
  #print( Ts,  N1, N2,  M12, M21, Tsc)
  m_demo=matrix(c(Ts,N1,N2,Na,M12,M21,Tsc),ncol=7)
  m_demo=as.data.frame(m_demo)
  locus<-cbind(m_locus,m_demo)
    path <- "/home/kadurand/partage_windows/Xylella/analyses_genomiques/ABC/fastSimBac_linux/Priors_SC_
    write.table(locus,file= paste(path,i, sep="-"),col.names=FALSE,row.names =FALSE)
}
```

Distribution des Priors

```
##     V1            V2           V3  V4      V1       V2       V3       V4
## 1  321 -5.695371e-04 0.0004661693 785 1258.55 2153.524 25256.13 9798.378
## 2 1974 -7.038386e-04 0.0008967288  55 1258.55 2153.524 25256.13 9798.378
## 3  513 -6.362673e-04 0.0006969321 467 1258.55 2153.524 25256.13 9798.378
## 4  809 -5.664366e-04 0.0005603359 539 1258.55 2153.524 25256.13 9798.378
## 5  819 -8.419474e-06 0.0006012395 354 1258.55 2153.524 25256.13 9798.378
## 6  876 -9.284995e-04 0.0005651887 831 1258.55 2153.524 25256.13 9798.378
##        V5       V6       V7
## 1 5.89409 28.08332 13.69004
## 2 5.89409 28.08332 13.69004
## 3 5.89409 28.08332 13.69004
## 4 5.89409 28.08332 13.69004
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```