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/l
L<-scan("/home/kadurand/partage_windows/Xylella/analyses_genomiques/ABC/msms/lenght")#bound_taille du g
t<-runif(997,1E-6, 0.01 )#bound_theta=[0-0.0003]bornes vrai pour 13pauca_multiplex augmenter la borne s
r<-runif(997,0,0.01)#bound_rho=[0-0.0003]bornes vrai pour 13pauca_multiplex augmenter la borne sup à 0.
delta<-round(runif(997,10, 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 1:1000){#tirage des priors demographiques
  #variables demographique modéle SC
  ##Param_demo (7) =  Ts,  N1,  N2,M12, M21, Tsc, T1,
  Ts<-rlunif(1,1E+4,1E+7)#bound=[1,100,1E+7]de 100ans a 100 000 ans
  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(1,10,1E+5)#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/msms/Priors_SC_msms_mod/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  258 0.0045338886 0.0035591767 806 19470.79 74910.68 7367.985 86143.38
## 2 1275 0.0076955636 0.0060471911 284 19470.79 74910.68 7367.985 86143.38
## 3 1074 0.0029870941 0.0004172091 920 19470.79 74910.68 7367.985 86143.38
## 4 1197 0.0023498444 0.0064293939 556 19470.79 74910.68 7367.985 86143.38
## 5  645 0.0071475907 0.0040714883  98 19470.79 74910.68 7367.985 86143.38
## 6 1584 0.0003883631 0.0041924516 748 19470.79 74910.68 7367.985 86143.38
##         V5       V6      V7
## 1 9.295374 23.79758 9740.15
## 2 9.295374 23.79758 9740.15
## 3 9.295374 23.79758 9740.15
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```