

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(997,0, 0.001 )#bound_theta=[0-0.0003]bornes vrai pour 13pauca_multiplex augmenter la borne sup
r<-runif(997,0,0.001)#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*L,r*L),ncol=3)
m_locus=as.data.frame(m_locus)

for (i in 1:1000){#tirage des priors demographiques
  #variables demographique modèle SC
  ##Param_demo (7) = Ts, N1, N2,M12, M21, Tsc, T1,
  Ts<-runif(1,0,1000)#bound=[1,100,1E+7] Ts/4N0
  N1<-runif(1,0,1E+3)#bound=[100,1E+6] X=N1/N0
  N2<-runif(1,0,1E+3)#bound=[100,1E+6]
  Na<-runif(1,0,1E+3)#Bound=[100,1E+6]
  M12<-runif(1,0.01,50)#bound=[0.01-30]
  M21<-runif(1,0.01,50)#bound=[0.01-30]
  Tsc<-runif(1,0,100)#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	V1	V2	V3	V4	V5
## 1	258	0.236360395	0.1043990	669.5127	474.7733	865.1679	814.7832	32.84917	
## 2	1275	0.521071751	0.8718451	669.5127	474.7733	865.1679	814.7832	32.84917	
## 3	1074	0.125308092	0.8971681	669.5127	474.7733	865.1679	814.7832	32.84917	
## 4	1197	1.063716906	0.5721857	669.5127	474.7733	865.1679	814.7832	32.84917	
## 5	645	0.070970014	0.6241726	669.5127	474.7733	865.1679	814.7832	32.84917	
## 6	1584	0.003492641	0.9426455	669.5127	474.7733	865.1679	814.7832	32.84917	
##		V6	V7						
## 1		43.61671	32.81603						
## 2		43.61671	32.81603						
## 3		43.61671	32.81603						
## 4		43.61671	32.81603						
## 5		43.61671	32.81603						
## 6		43.61671	32.81603						