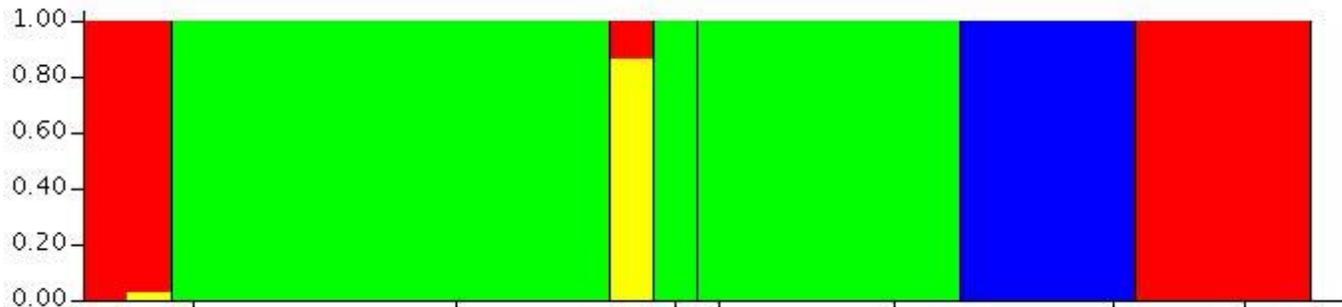
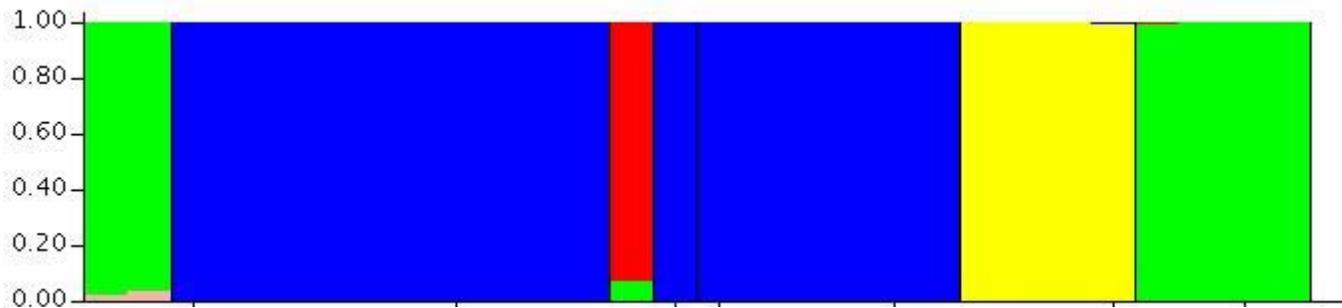


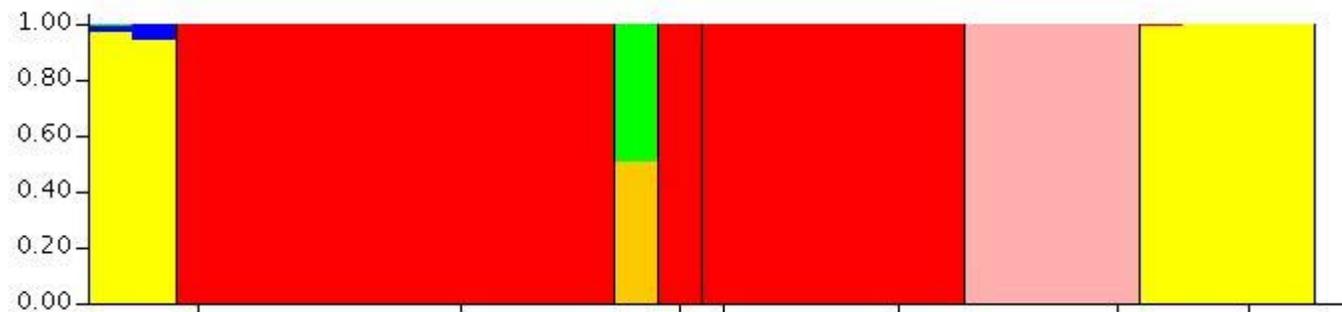
paradoxus populations



K=4



K=5

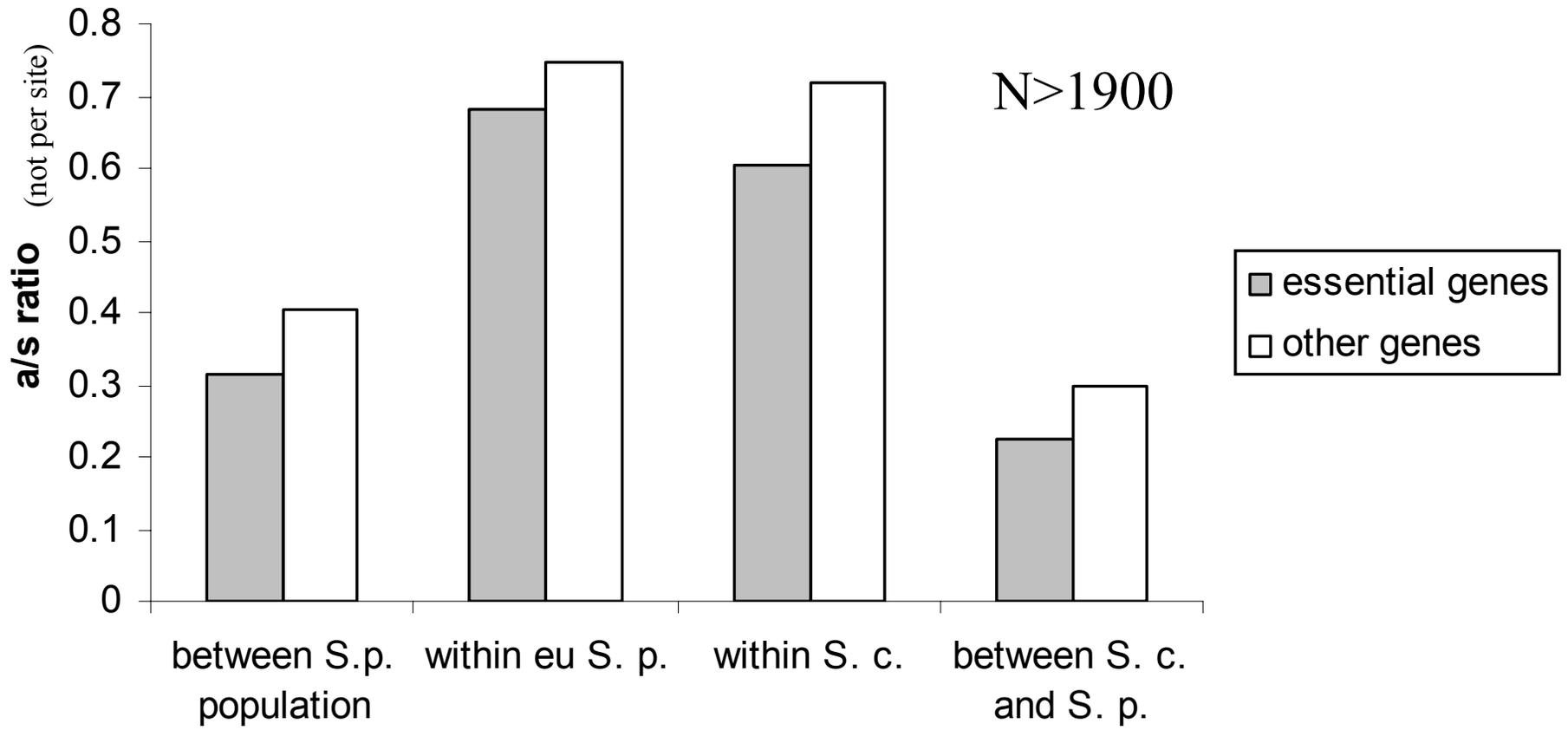


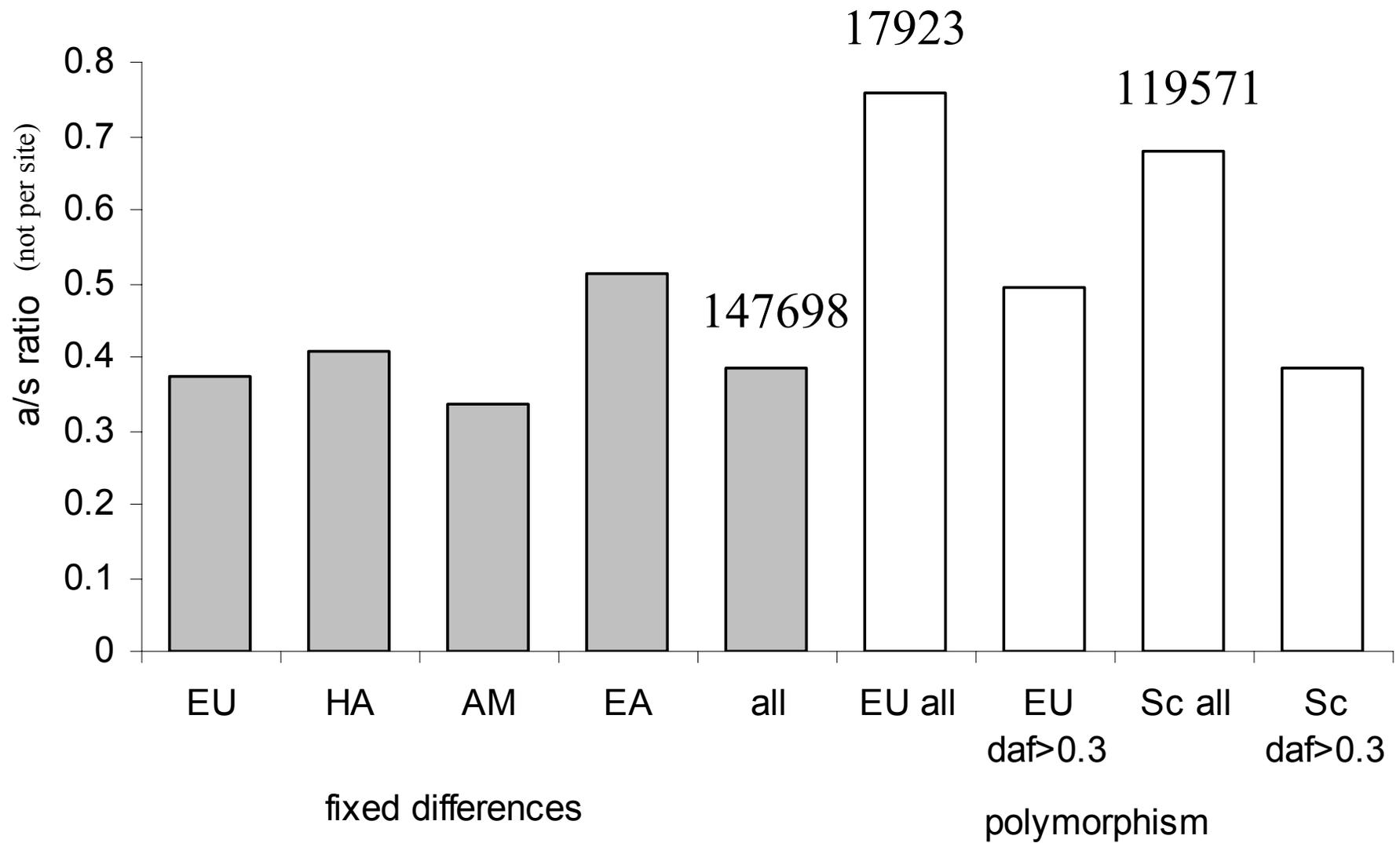
K=6

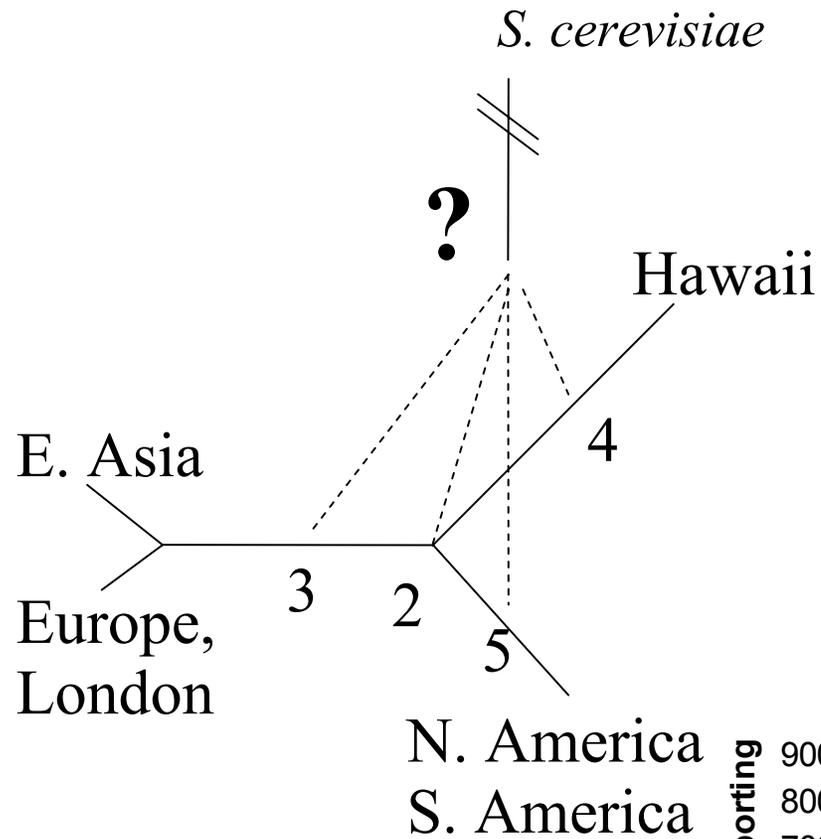
South America
 London
 Hawaii
 Reference
 Europe East Asia
 North America

1 2 3 4 5 6 7

1268
 markers
 with at
 least 25



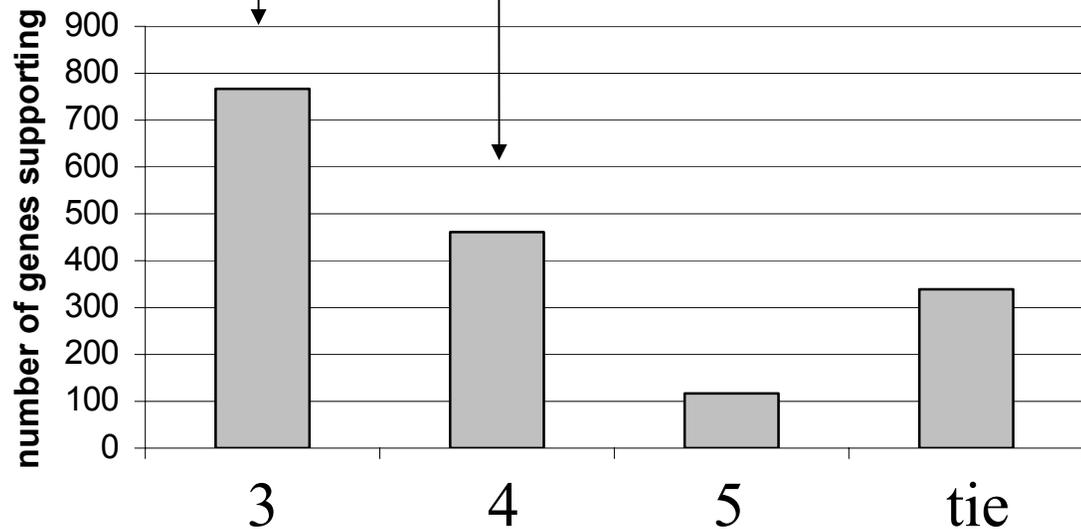




Based on David's neighbour joining tree

Most genes support Hawaii grouped with Americas...

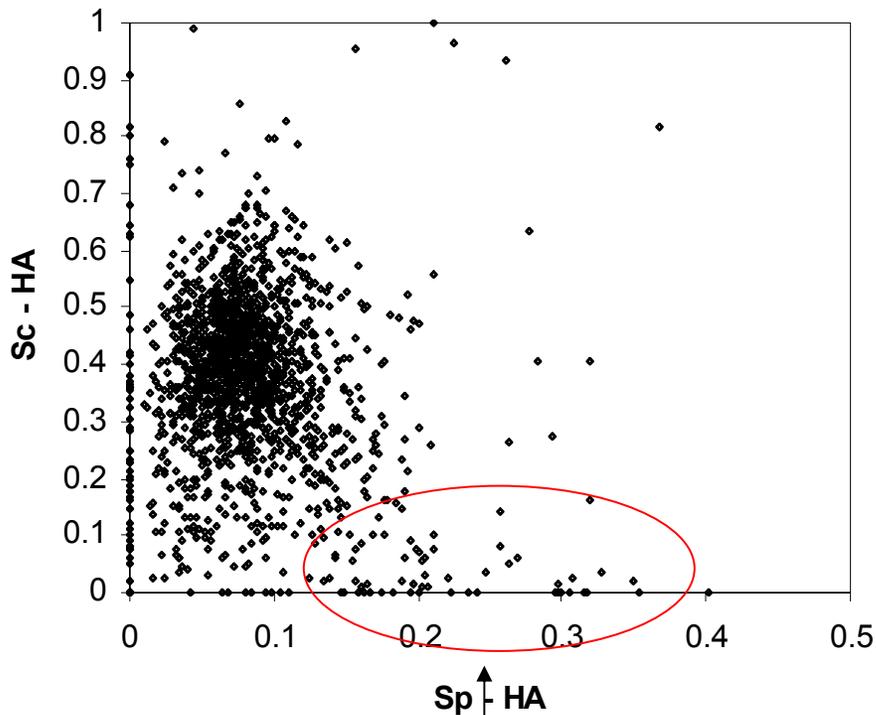
But many genes support Hawaii as ancestral???



YAL015C

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EA          ATG ACA CAA ATC AAT GAG ACC CAT TCA GTT GGG TTC CAC TCT ACC TGC
AAA CTT CGA GAT CAA TAT TCAGGT CCA GCT ACG TTG GCC CTG CCC GTG AAG TAT TTG TTA CAA AAG
GCA TGG ATT GAA GGT ATT GAC CAT GTG AGA GTA CCG ACC CAG ACT AAC CTA CCC ATA GGA TTC GGG
ACT TCG AGG AAT AAA TCG AAC TCC TTG TCT TTG GAT GGT GCG GAT GAT CCT GGA
EU          . . . . .
. . . . .
. . . . .
. . . . .
HA          . . . . .
. . . . .
. . . . .
. . . . .
LO          . . . . .
. . . . .
. . . . .
. . . . .
NA          . . . . .
. . . . .
. . . . .
. . . . .
SA          . . . . .
. . . . .
. . . . .
. . . . .
Scer       . . . . .
. . . . .
. . . . .
. . . . .
```

In most genes, substitutions group Hawaii with Americas

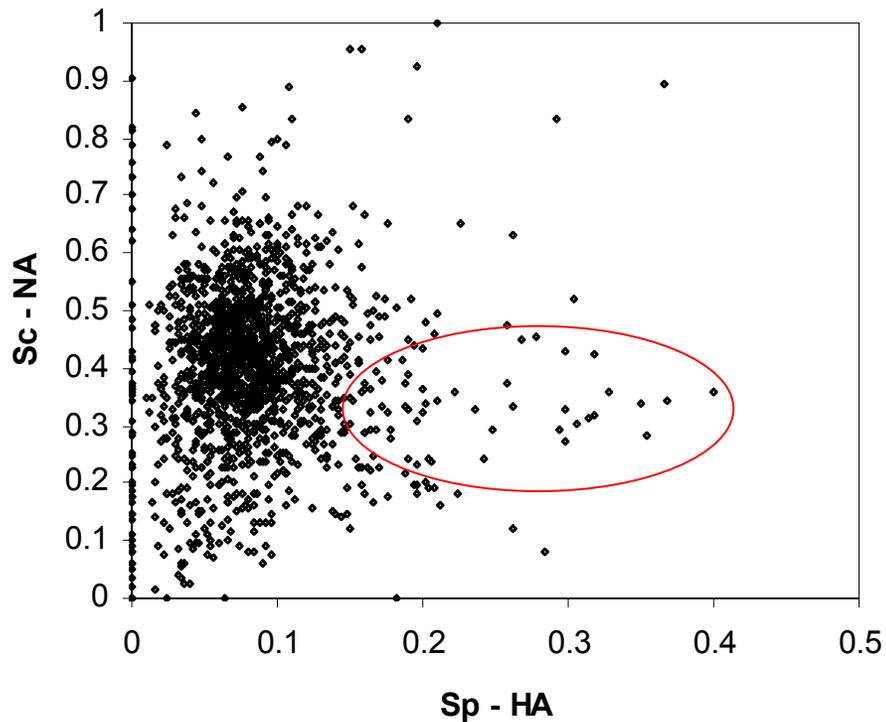


$Sp - HA$

↑

This material is
close to Sc and
far from Sp

Leo has a clearer picture of
this (?)



But not in the
North
American

