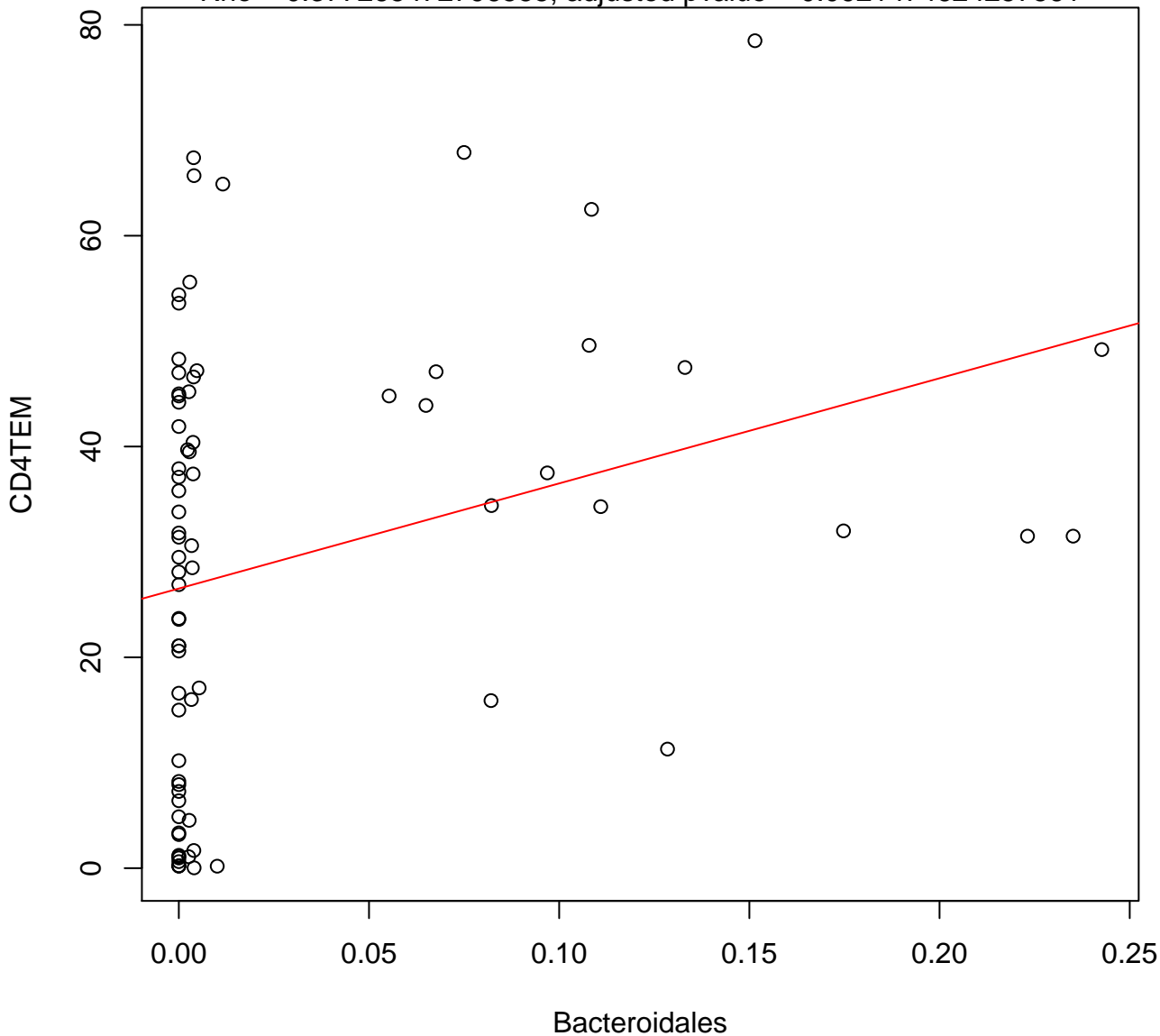


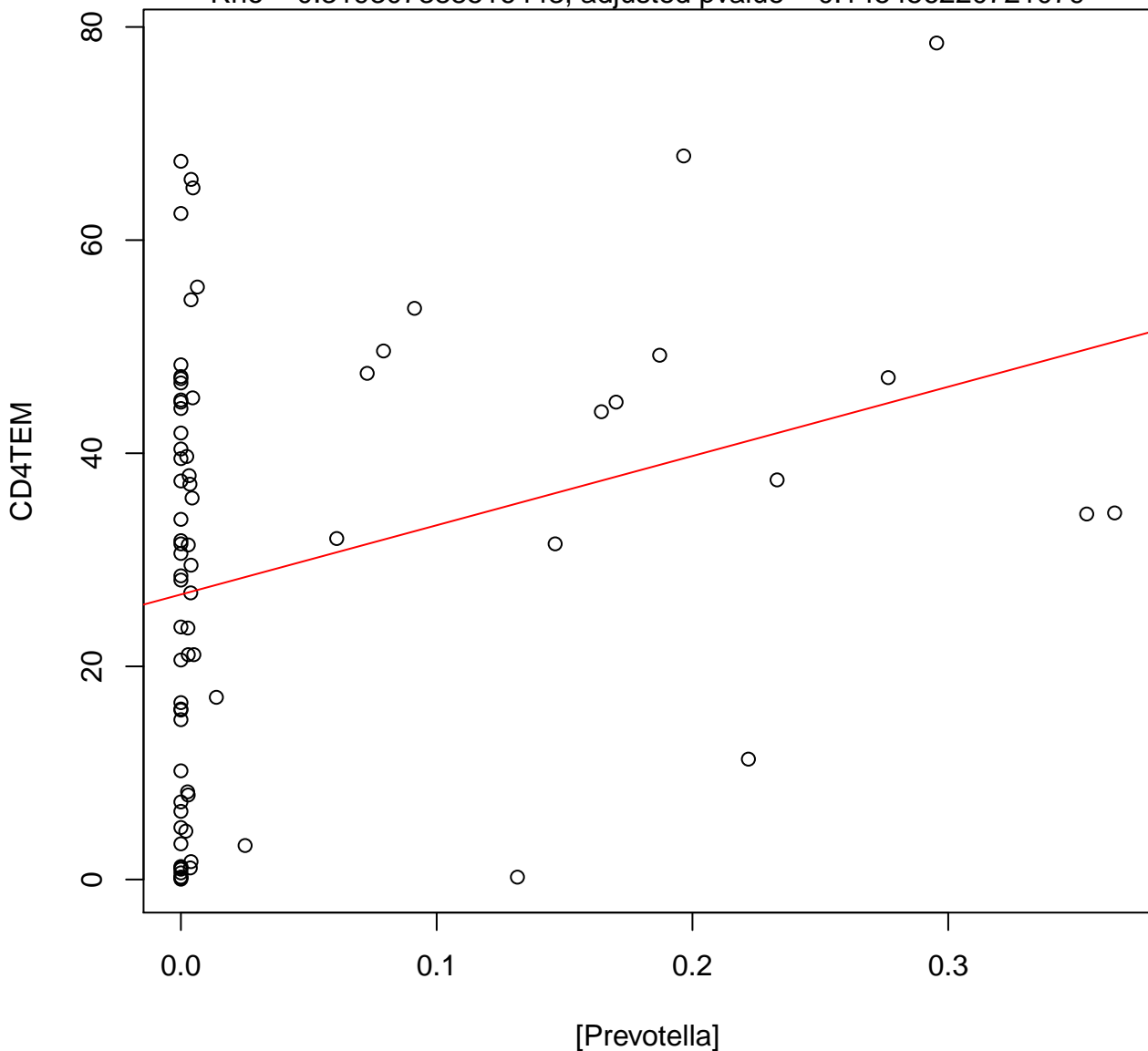
## Timepoint 2 , CD4TEM ~ Bacteroidales

Rho = 0.377265472796555, adjusted pvalue = 0.0921474624257561



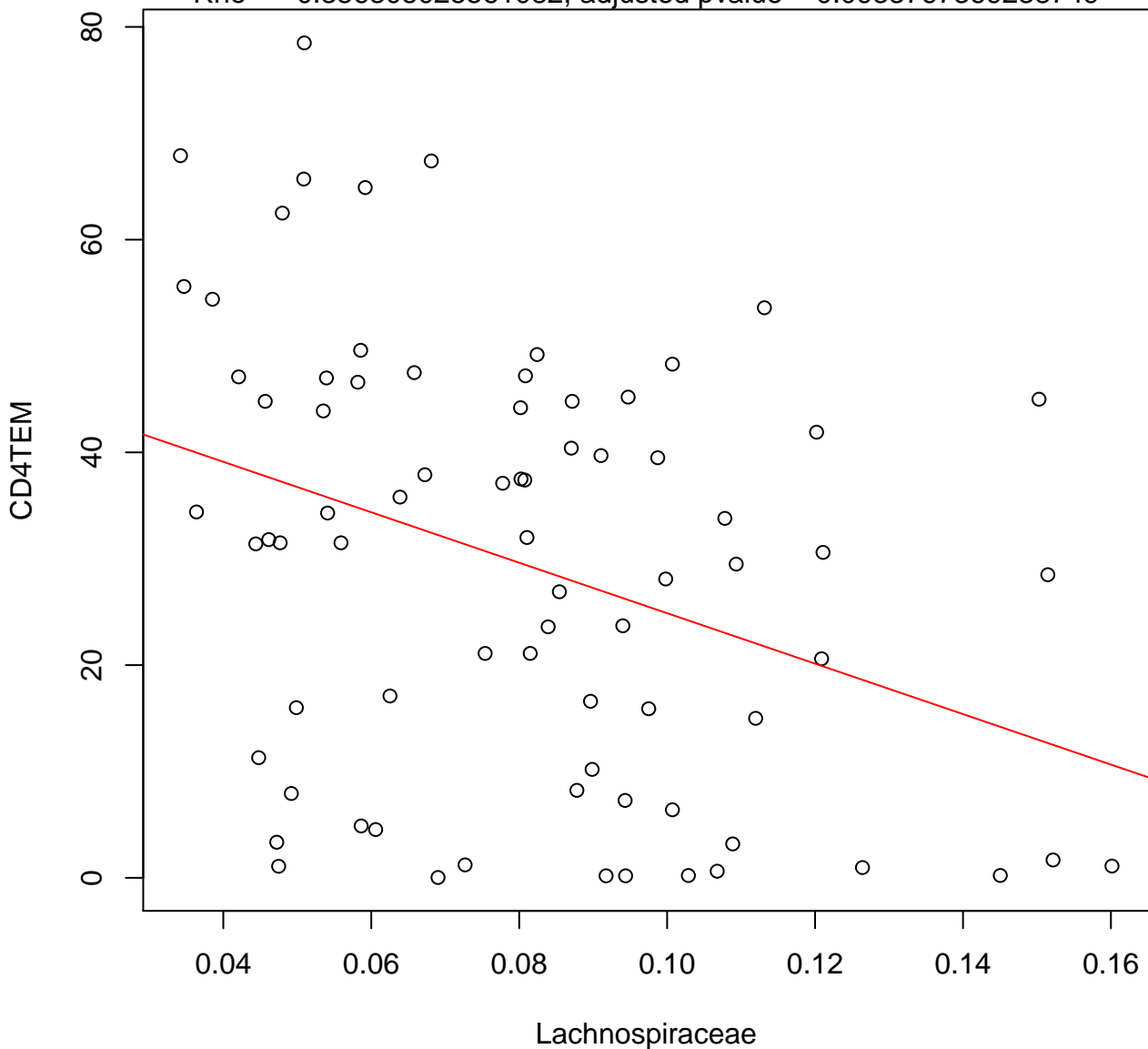
# Timepoint 2 , CD4TEM ~ [Prevotella]

Rho = 0.319307388516443, adjusted pvalue = 0.145456220721079



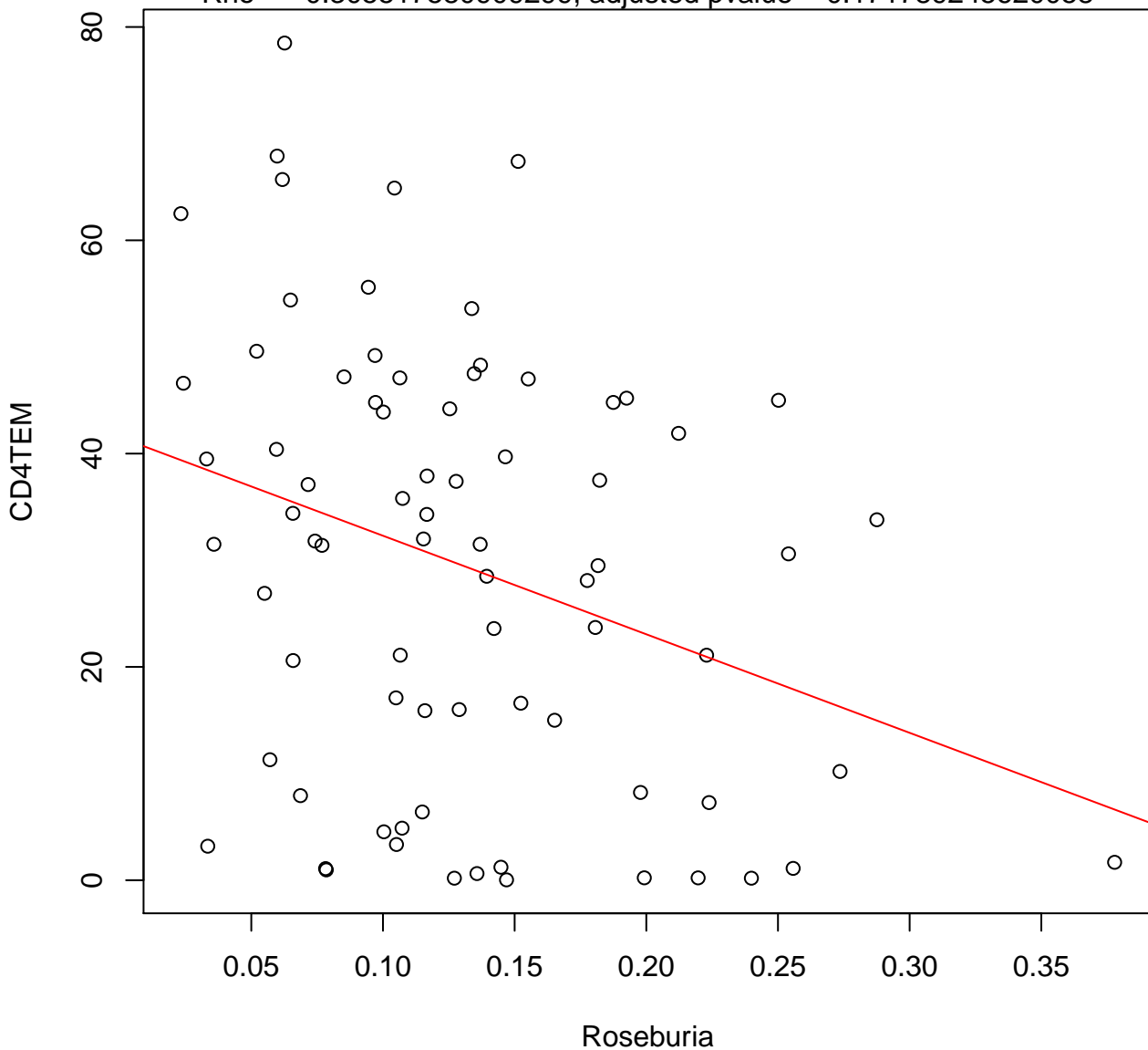
# Timepoint 2 , CD4TEM ~ Lachnospiraceae

Rho =  $-0.356305025561082$ , adjusted pvalue =  $0.0933767369238749$



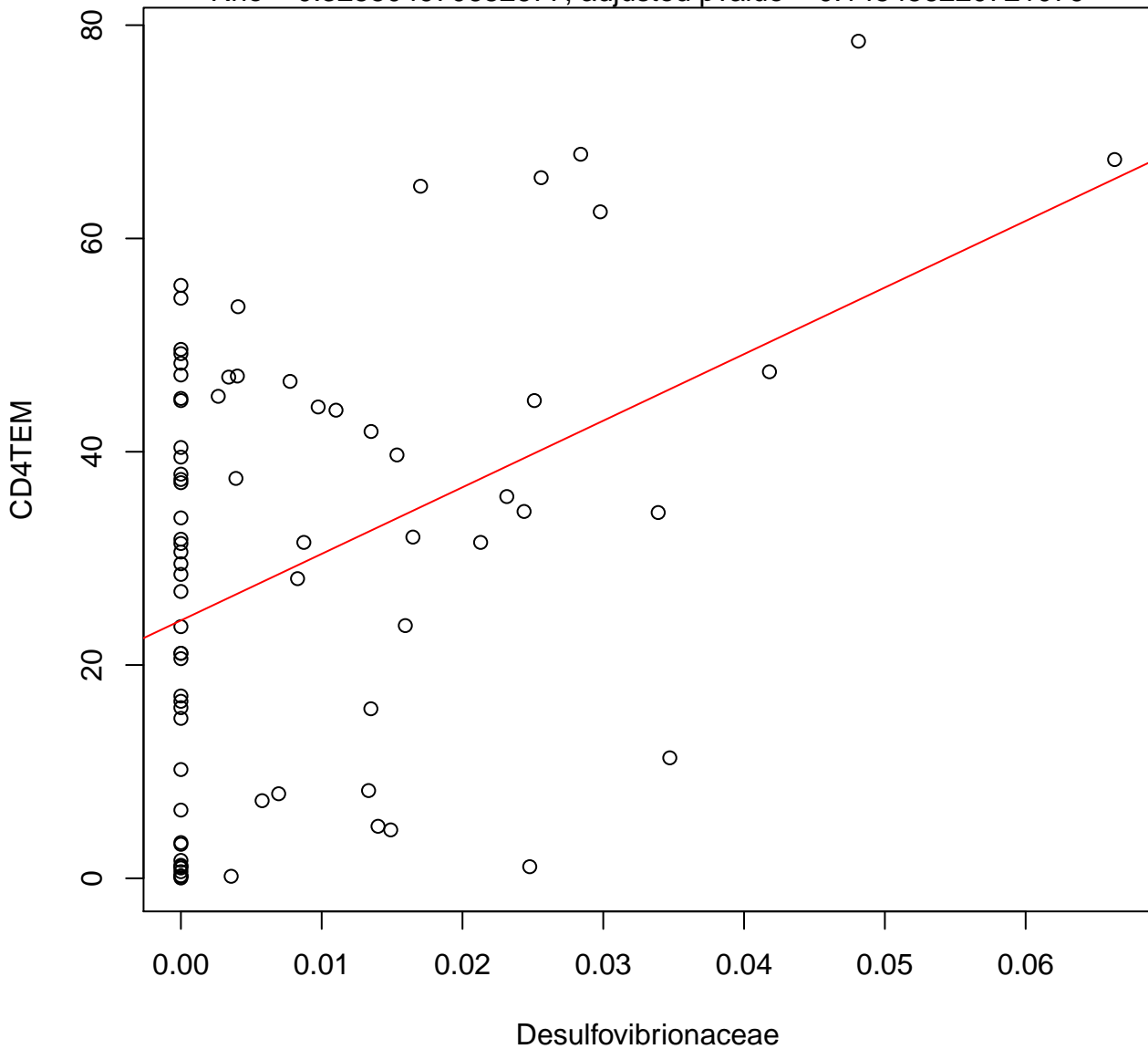
## Timepoint 2 , CD4TEM ~ Roseburia

Rho =  $-0.305517580909299$ , adjusted pvalue =  $0.171789245620058$



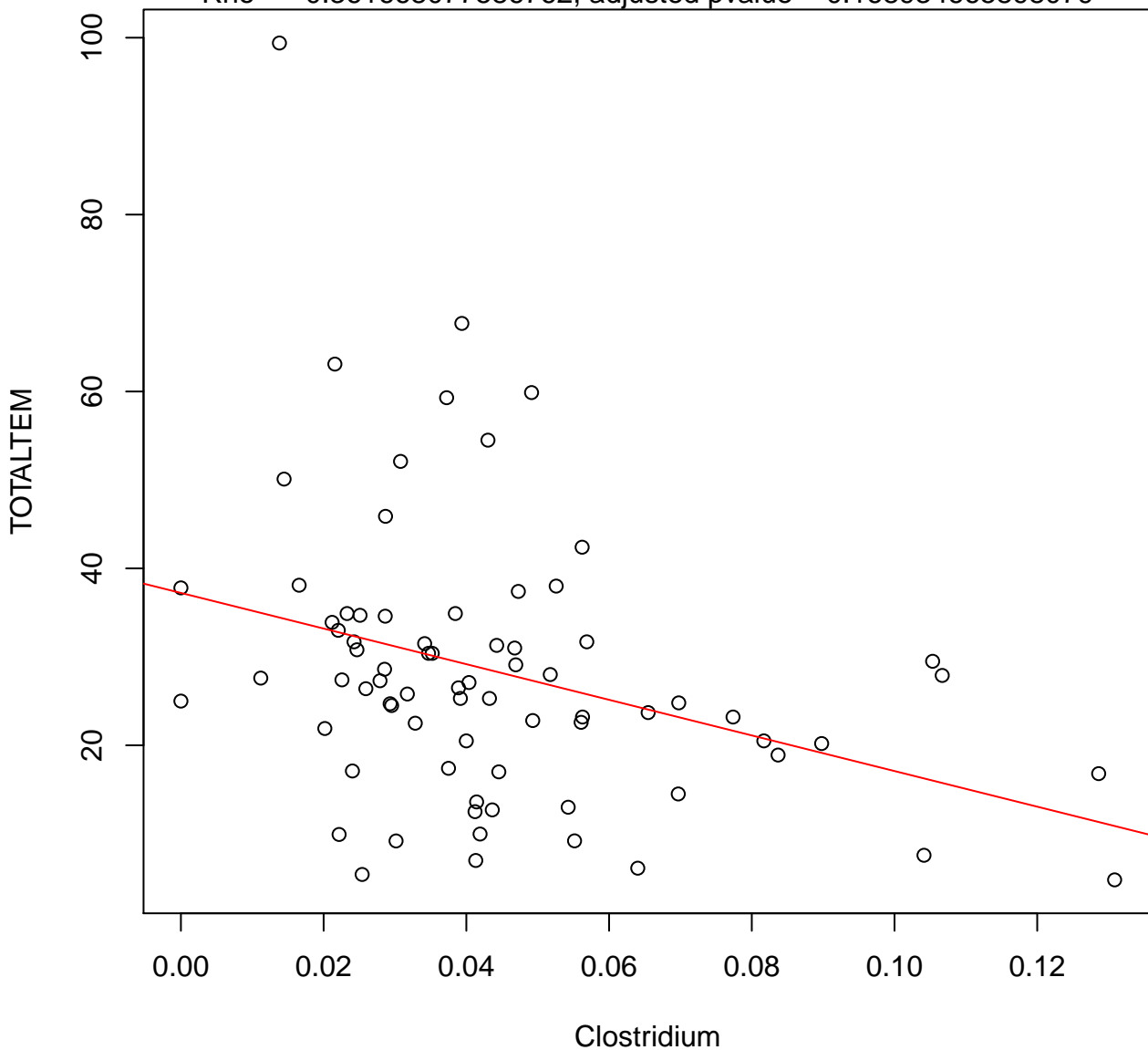
# Timepoint 2 , CD4TEM ~ Desulfovibrionaceae

Rho = 0.325504970682677, adjusted pvalue = 0.145456220721079



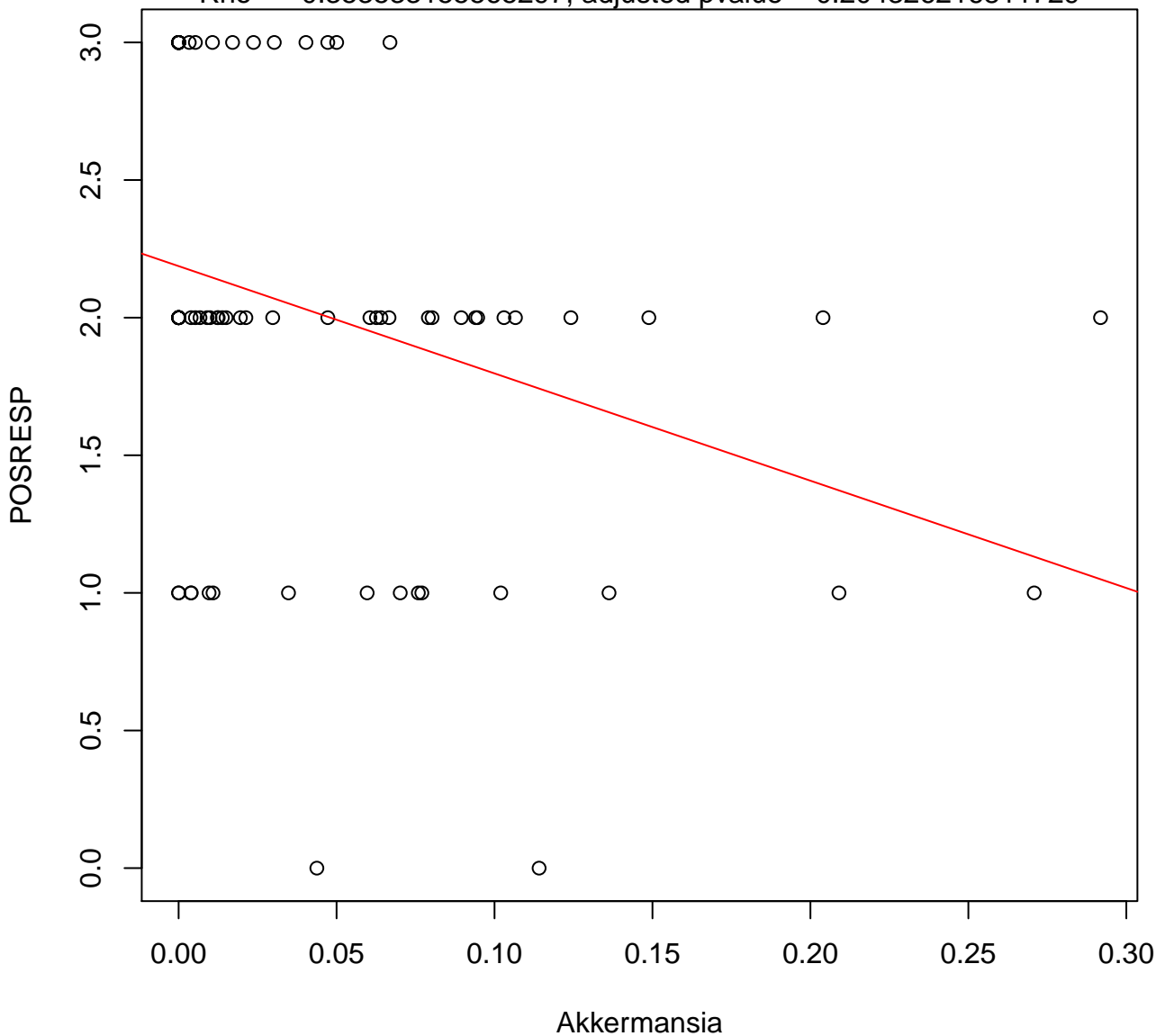
## Timepoint 2 , TOTALTEM ~ Clostridium

Rho =  $-0.361668077586762$ , adjusted pvalue =  $0.168934665898079$



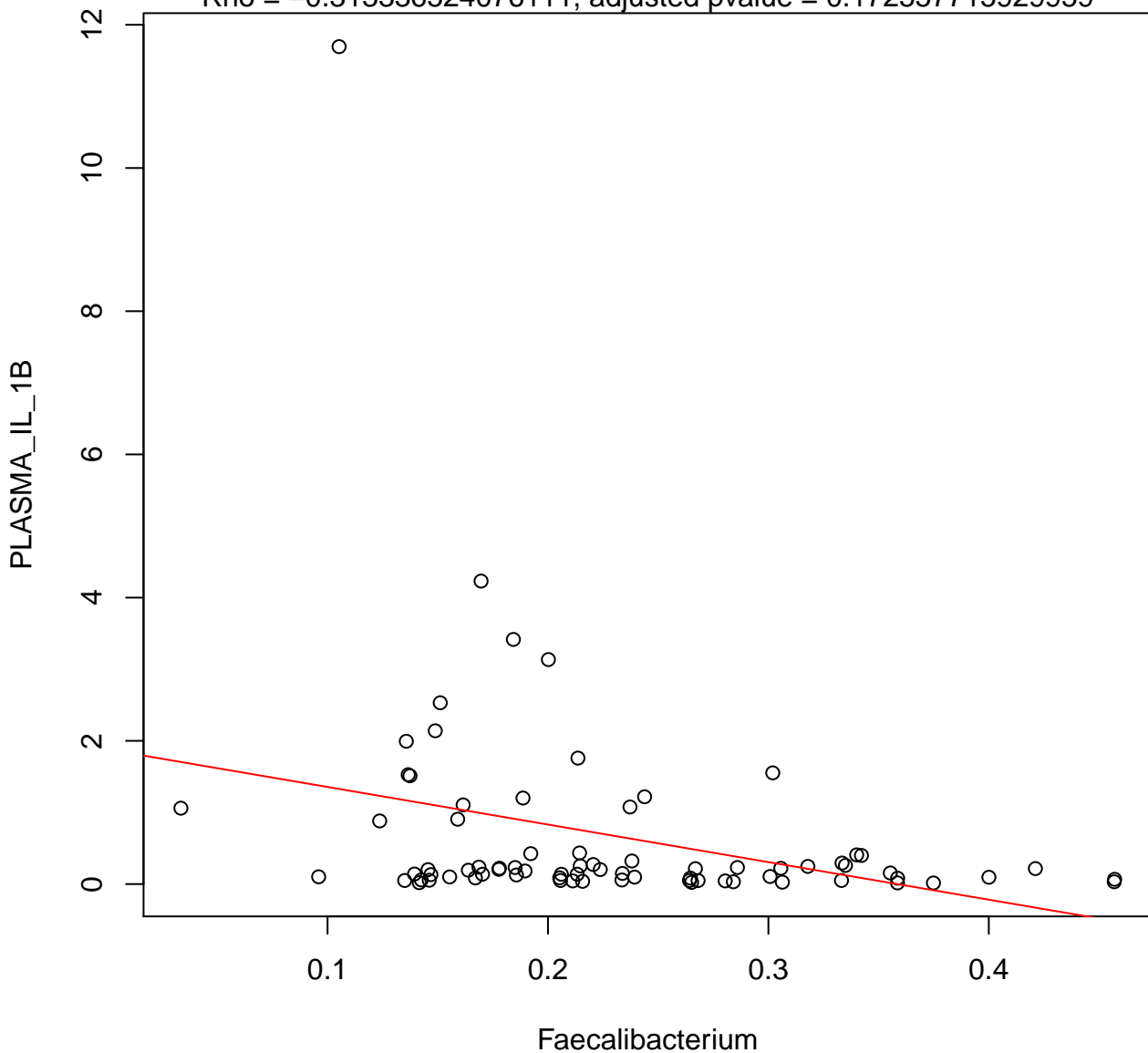
# Timepoint 2 , POSRESP ~ Akkermansia

Rho =  $-0.353533155565297$ , adjusted pvalue =  $0.204326216811729$



# Timepoint 2 , PLASMA\_IL\_1B ~ Faecalibacterium

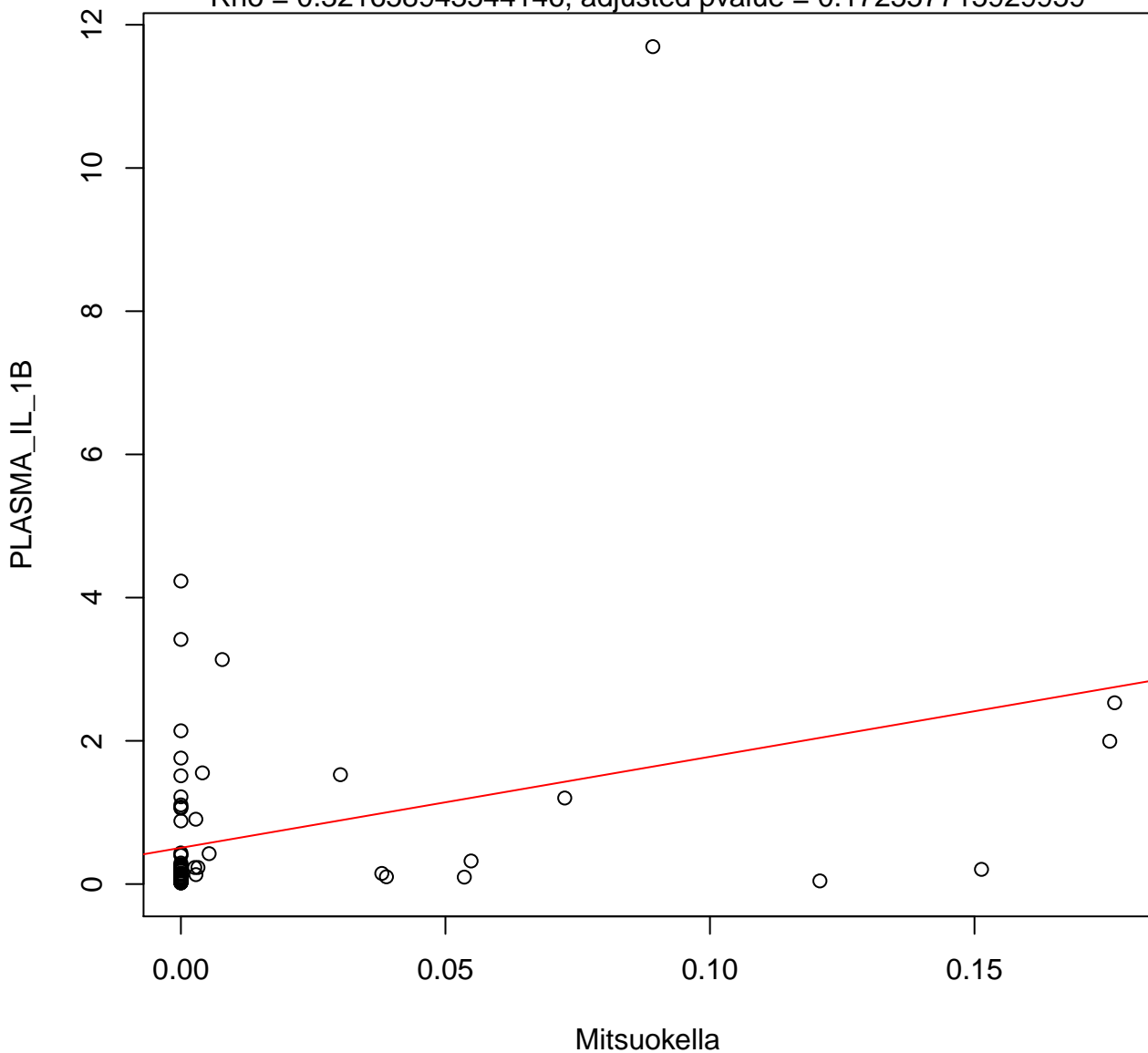
Rho =  $-0.313336524076111$ , adjusted pvalue =  $0.172557715929959$





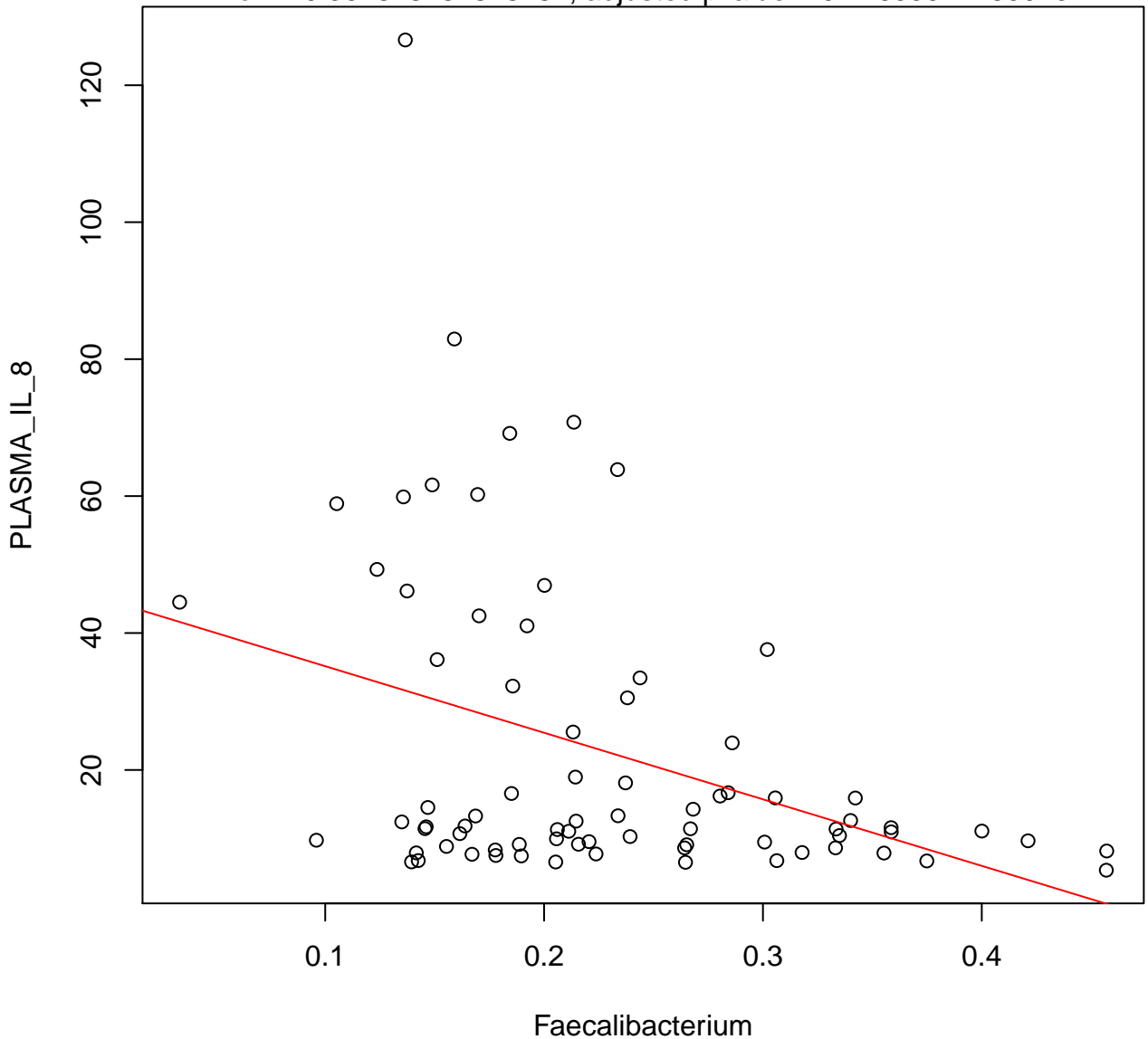
# Timepoint 2 , PLASMA\_IL\_1B ~ Mitsuokella

Rho = 0.321658943544146, adjusted pvalue = 0.172557715929959



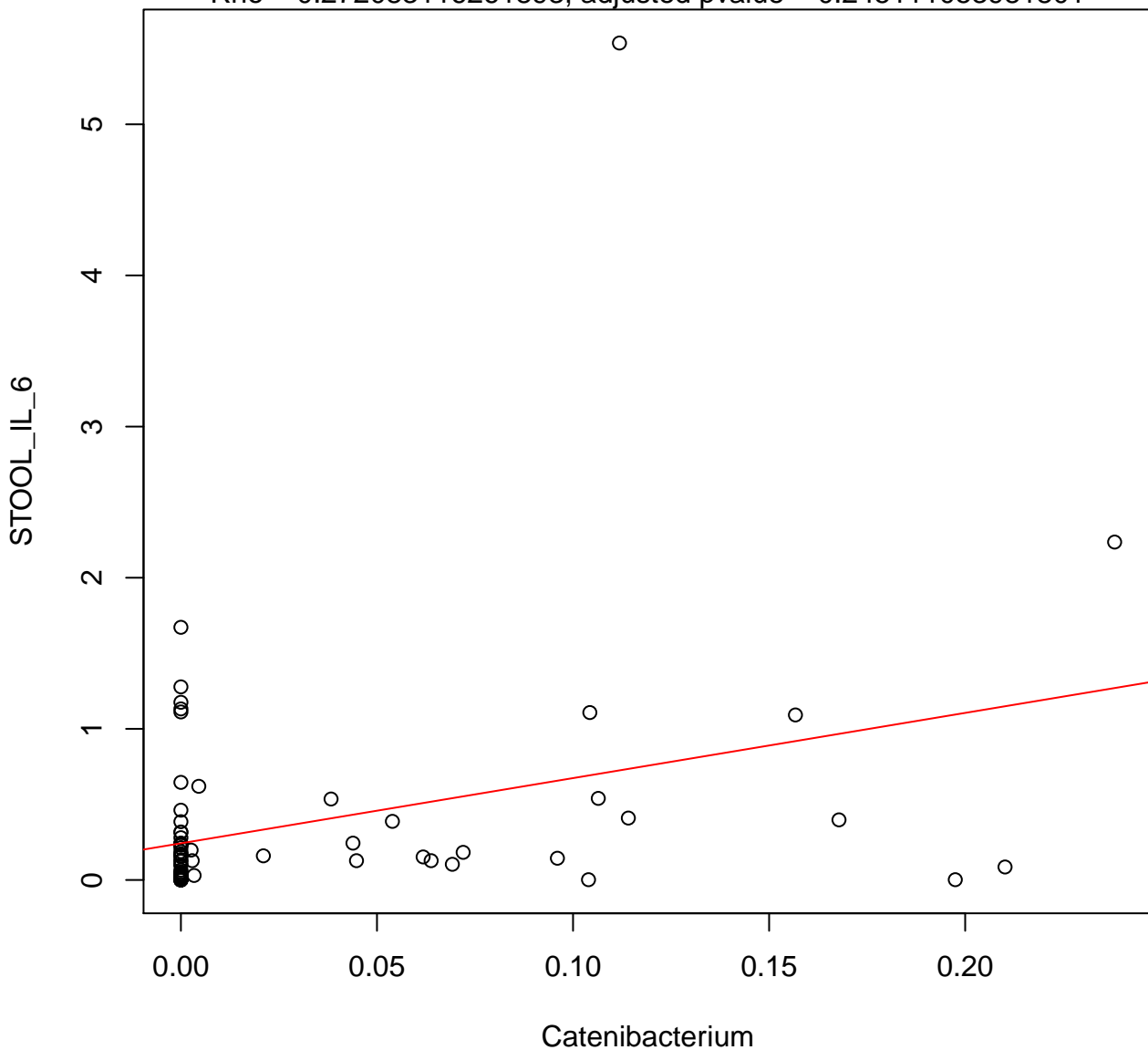
# Timepoint 2 , PLASMA\_IL\_8 ~ Faecalibacterium

Rho =  $-0.301818181818182$ , adjusted pvalue =  $0.246335777850234$



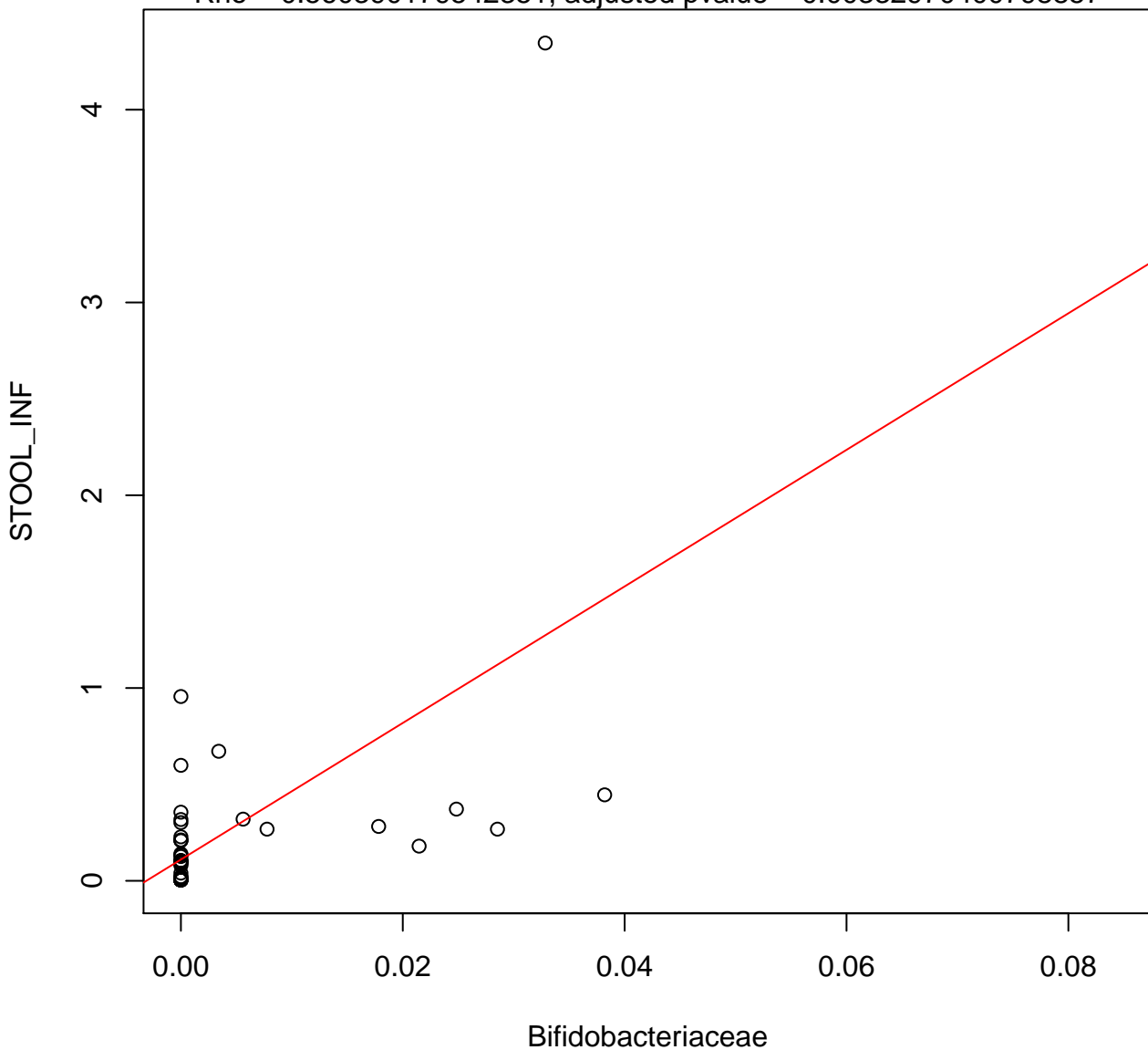
# Timepoint 2 , STOOIL\_IL\_6 ~ Catenibacterium

Rho = 0.272083116261893, adjusted pvalue = 0.245111053981801



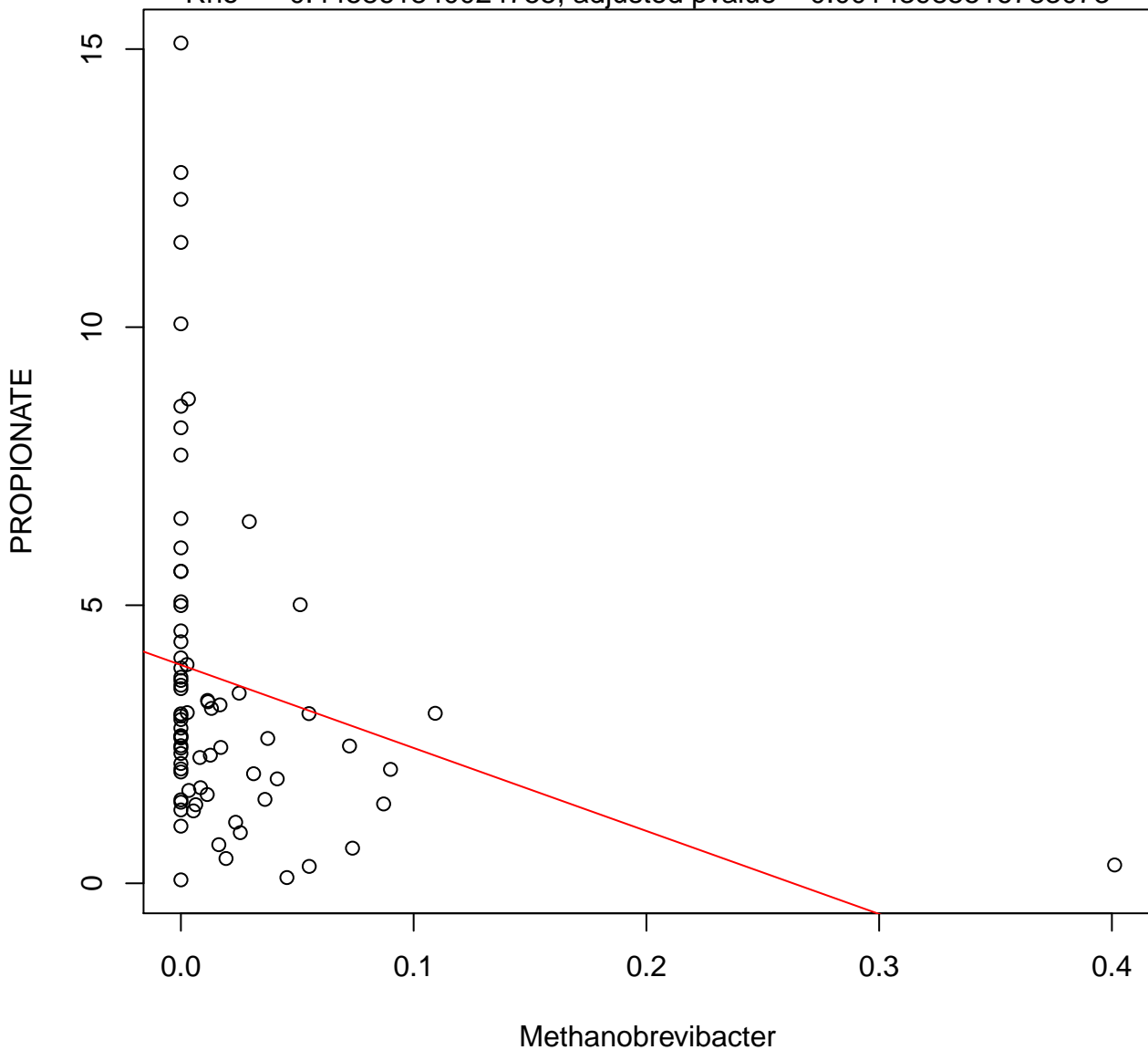
# Timepoint 2 , ST00L\_INF ~ Bifidobacteriaceae

Rho = 0.560390179542351, adjusted pvalue = 0.00332970400798857



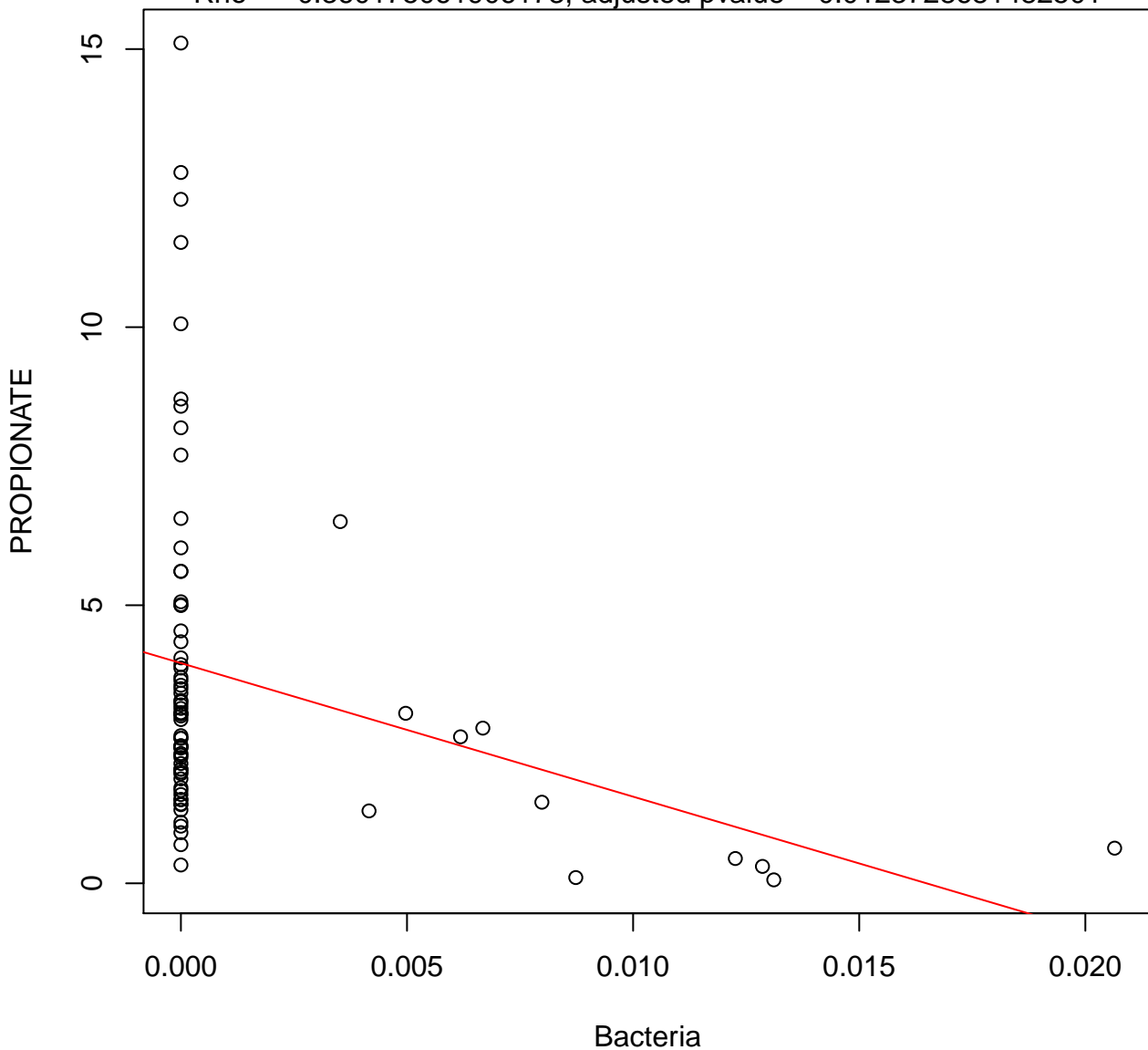
# Timepoint 2 , PROPIONATE ~ Methanobrevibacter

Rho =  $-0.445861840024755$ , adjusted pvalue =  $0.00143985516783073$



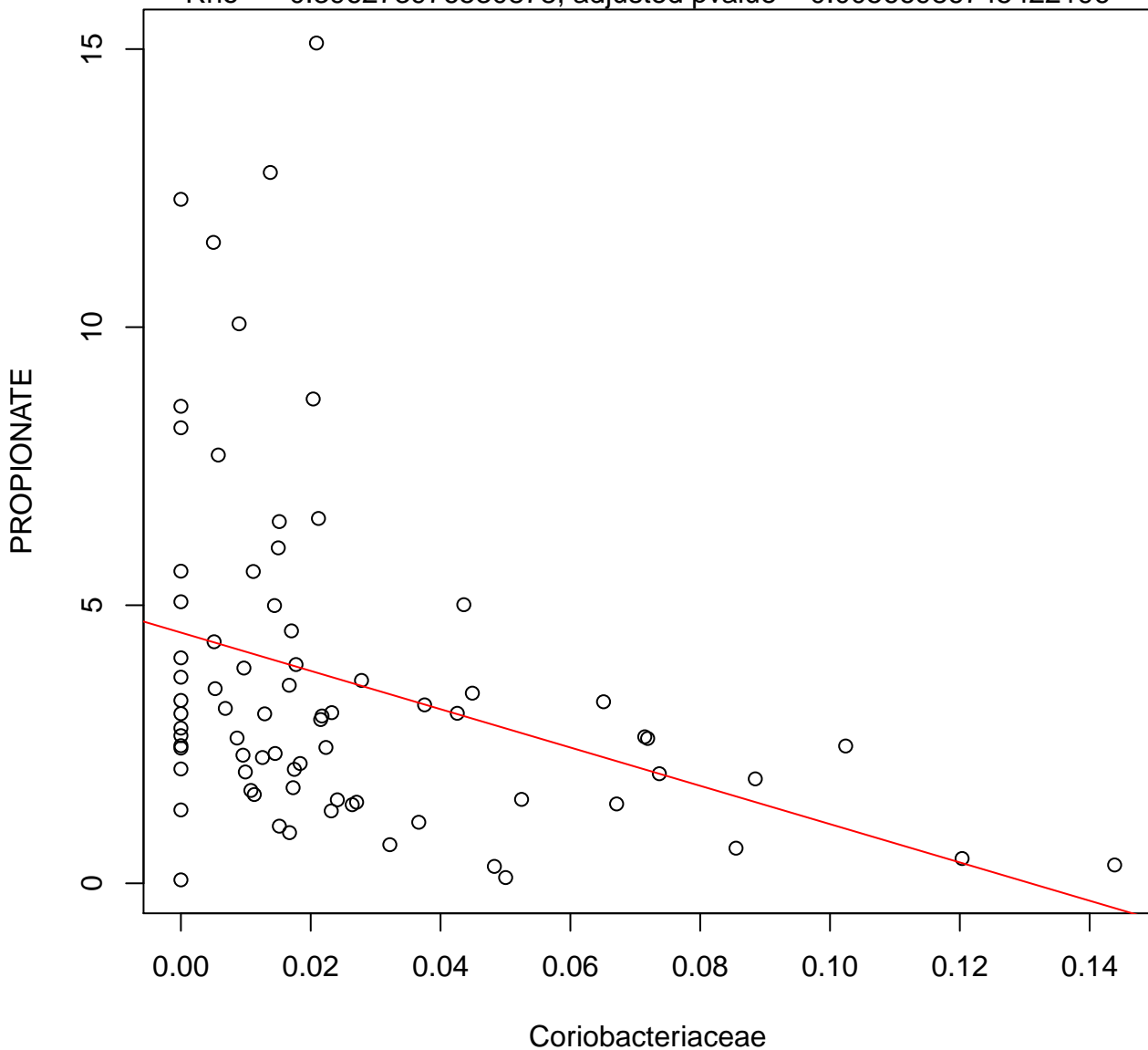
## Timepoint 2 , PROPIONATE ~ Bacteria

Rho =  $-0.360175061906173$ , adjusted pvalue =  $0.0123728681482501$



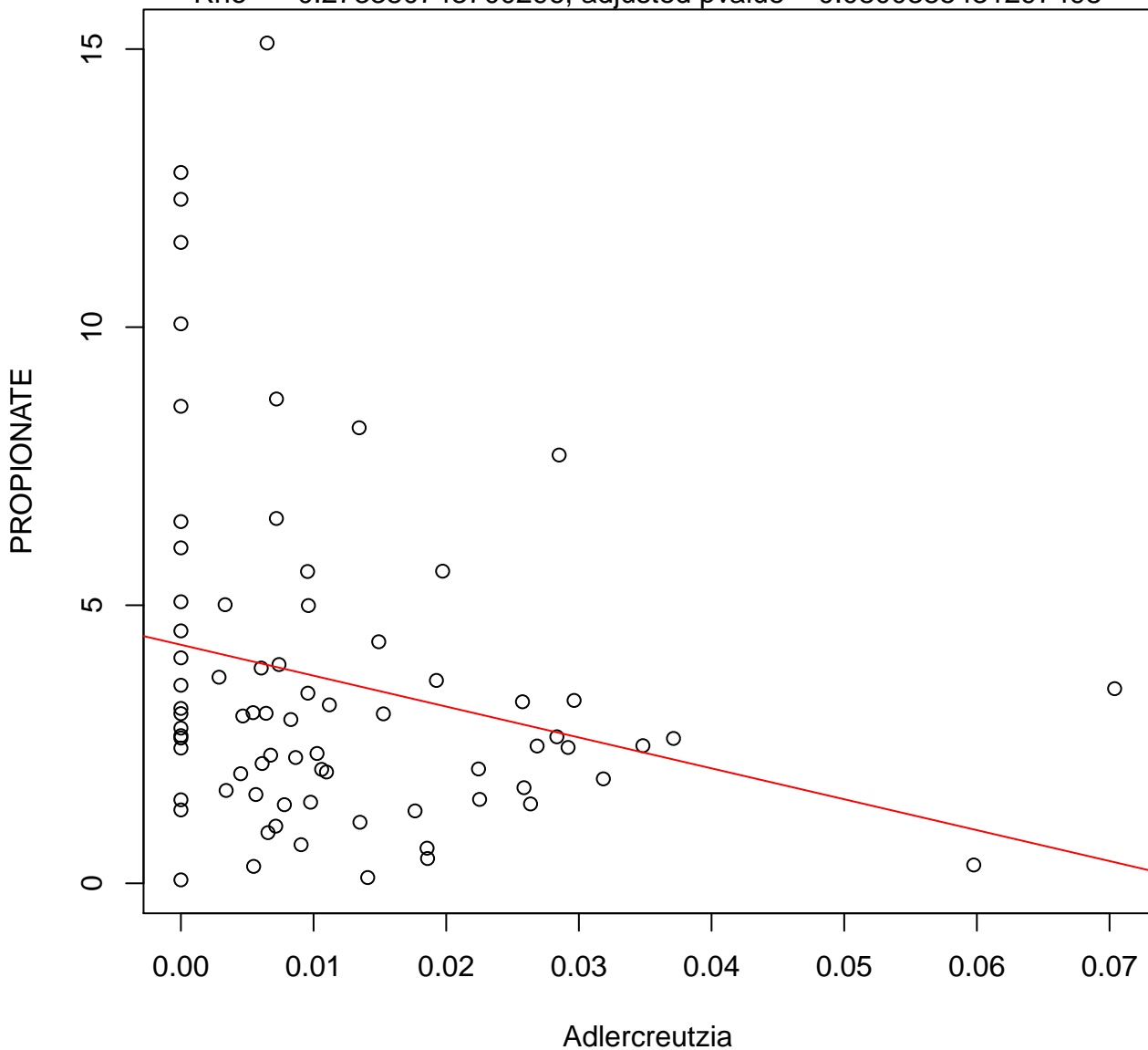
# Timepoint 2 , PROPIONATE ~ Coriobacteriaceae

Rho =  $-0.396273976530878$ , adjusted pvalue =  $0.00566986745422196$



# Timepoint 2 , PROPIONATE ~ Adlercreutzia

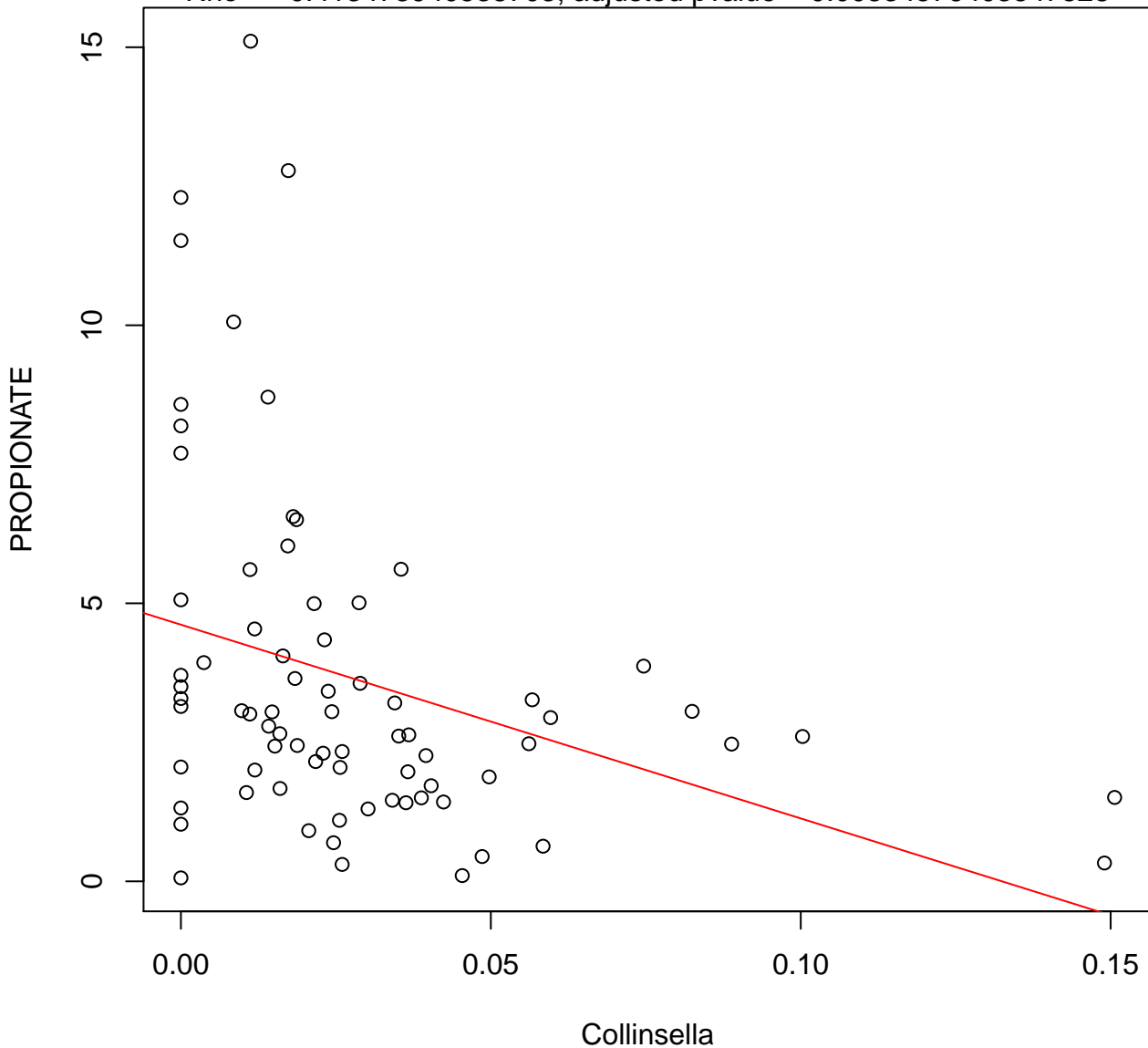
Rho =  $-0.273380743700296$ , adjusted pvalue =  $0.0800385431297498$





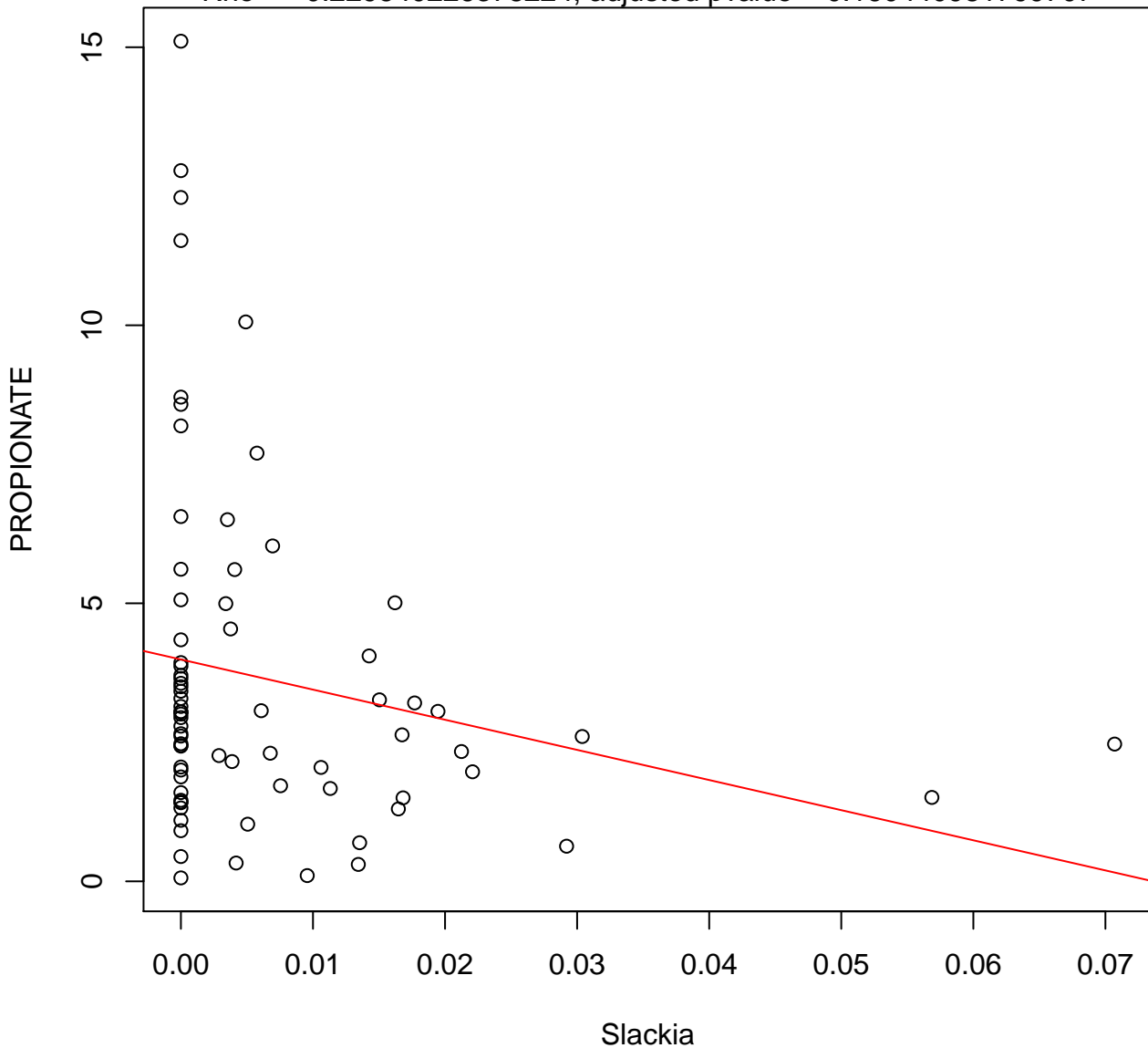
## Timepoint 2, PROPIONATE ~ Collinsella

Rho = -0.413473940538703, adjusted pvalue = 0.00334576403547528



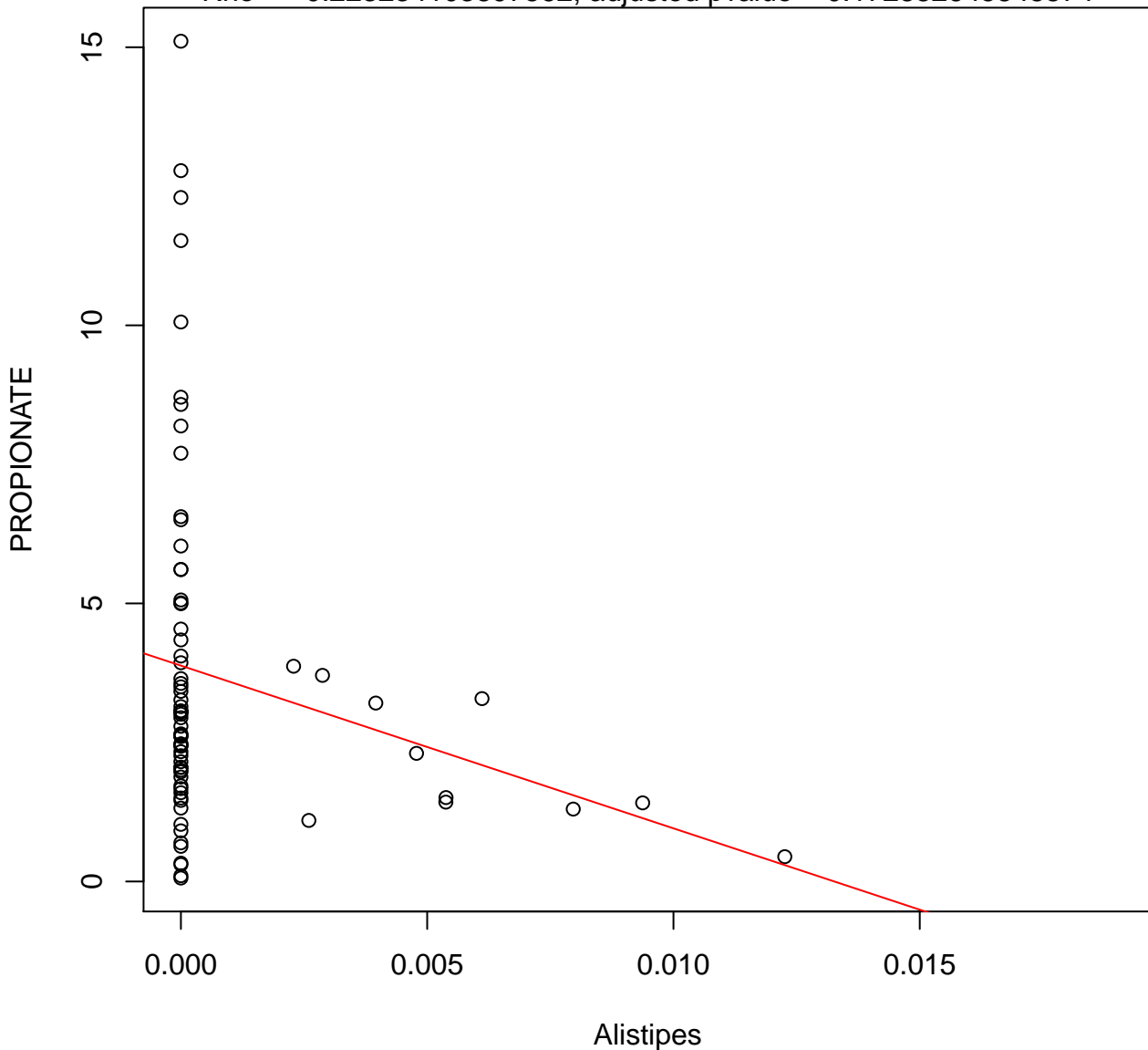
## Timepoint 2 , PROPIONATE ~ Slackia

Rho =  $-0.229540226378224$ , adjusted pvalue =  $0.160440981799707$



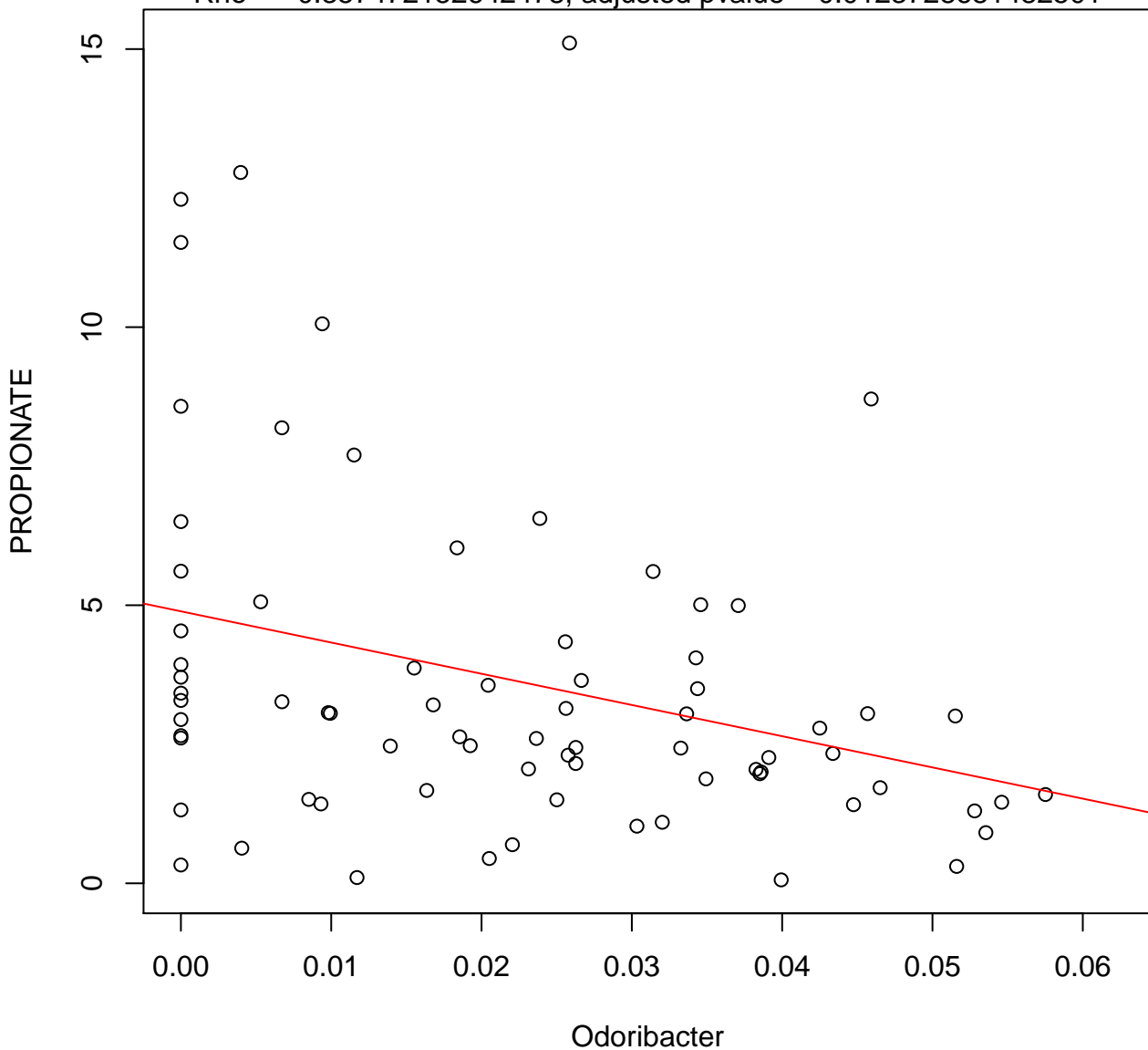
## Timepoint 2 , PROPIONATE ~ Alistipes

Rho = -0.223234103897562, adjusted pvalue = 0.172882645848874



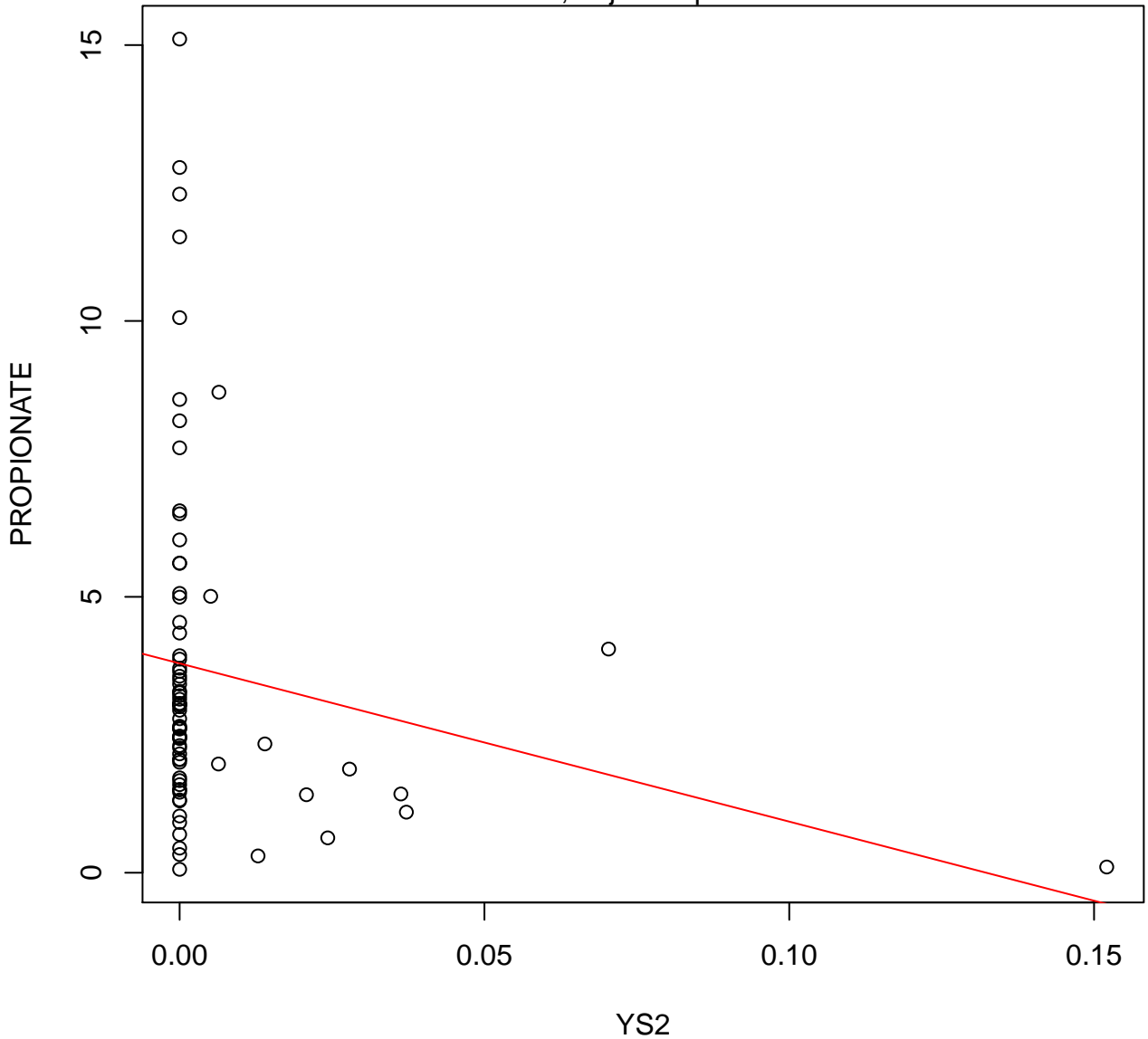
## Timepoint 2 , PROPIONATE ~ Odoribacter

Rho =  $-0.357472152642478$ , adjusted pvalue =  $0.0123728681482501$



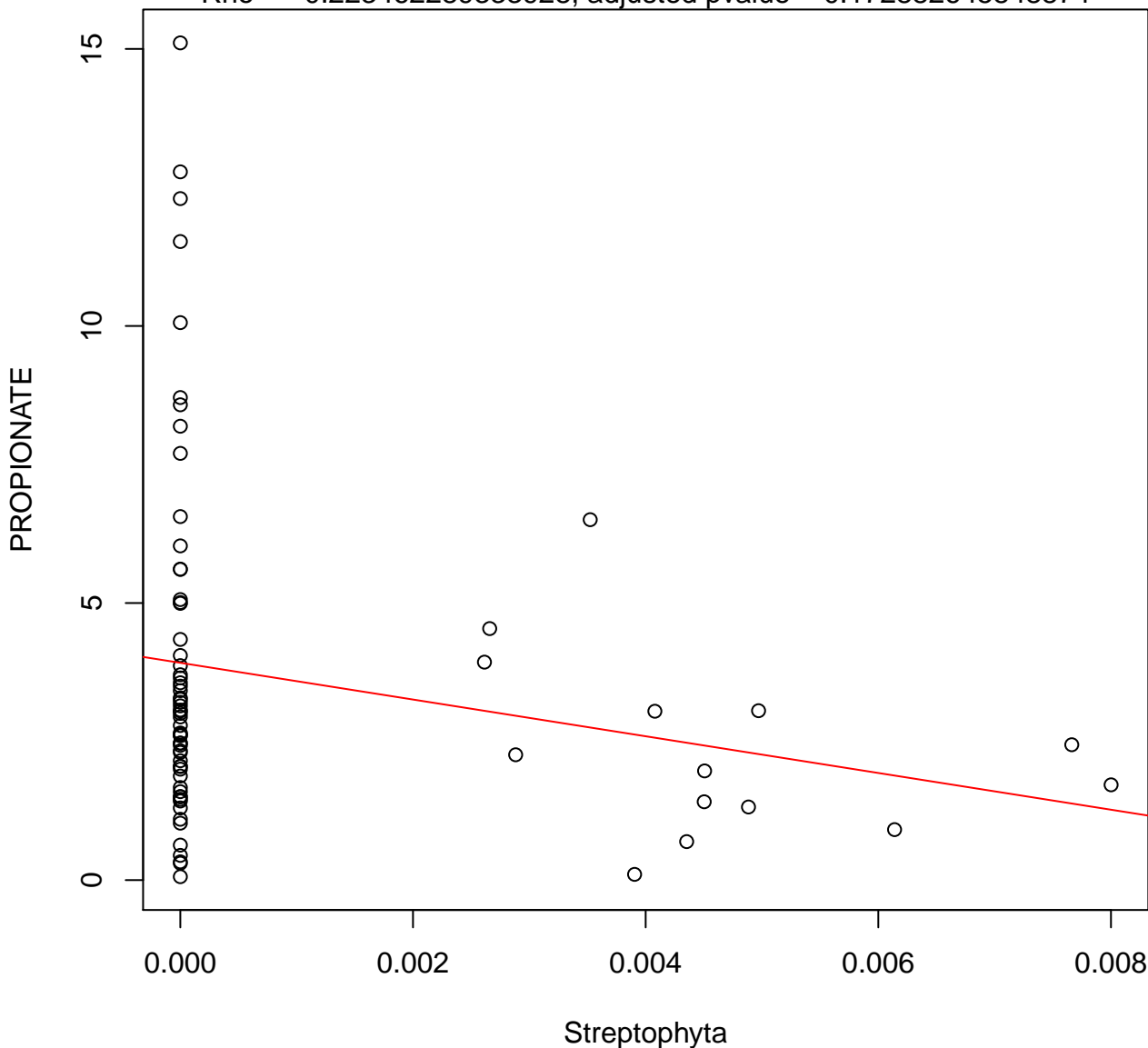
## Timepoint 2 , PROPIONATE ~ YS2

Rho =  $-0.266962628289134$ , adjusted pvalue =  $0.0892872568330862$



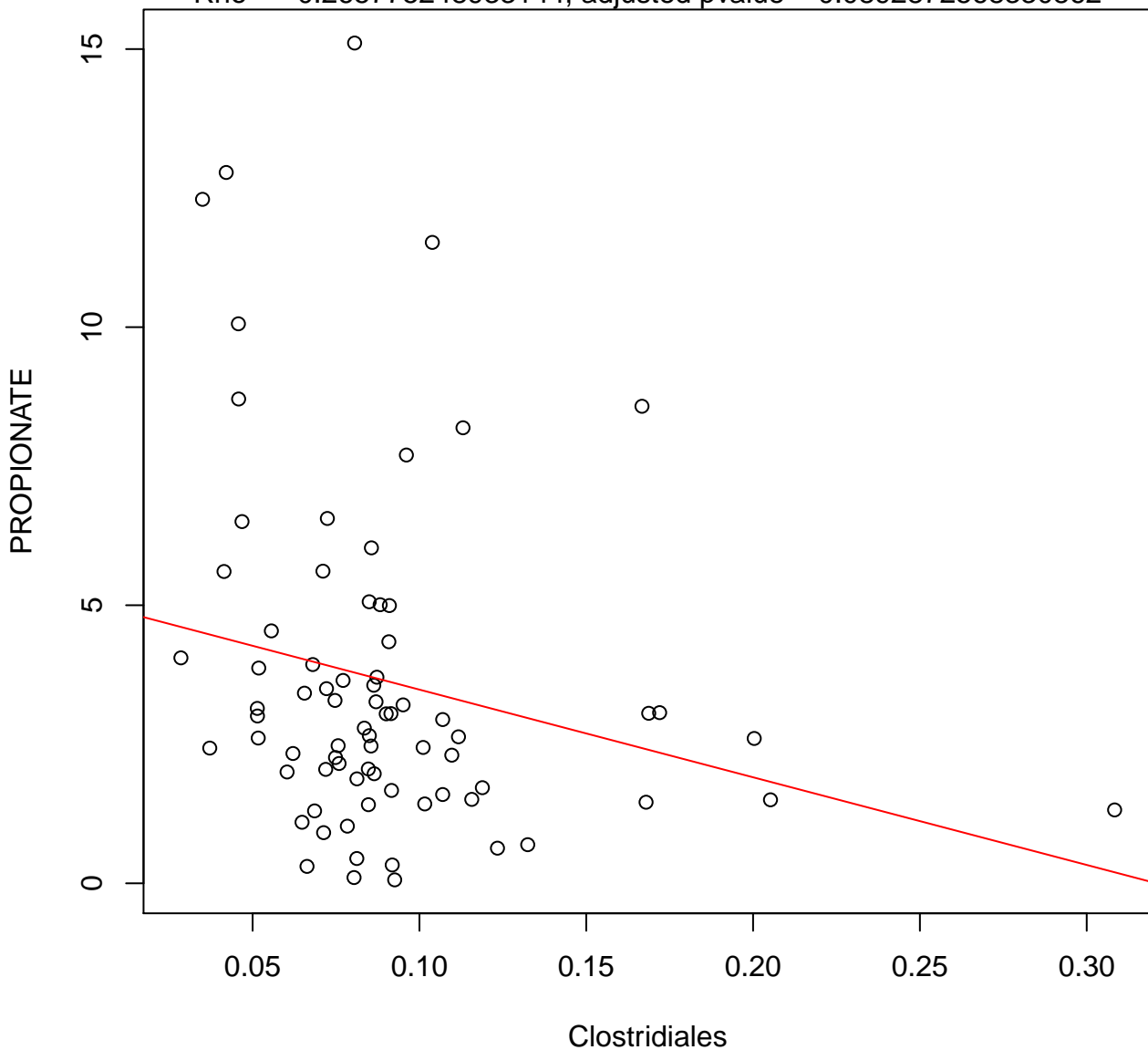
# Timepoint 2 , PROPIONATE ~ Streptophyta

Rho = -0.223462289333928, adjusted pvalue = 0.172882645848874



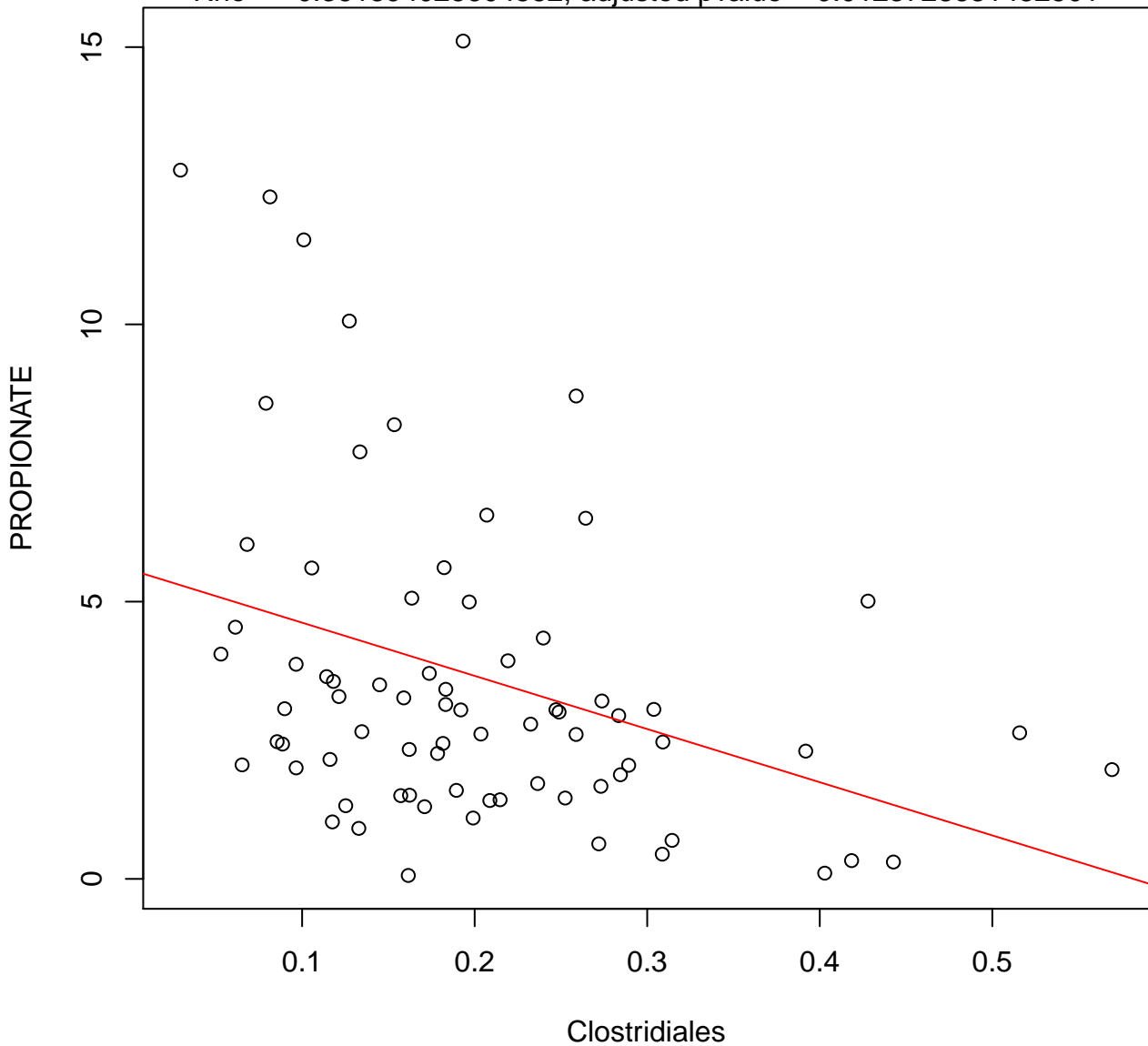
## Timepoint 2 , PROPIONATE ~ Clostridiales

Rho =  $-0.265775248933144$ , adjusted pvalue =  $0.0892872568330862$



## Timepoint 2 , PROPIONATE ~ Clostridiales

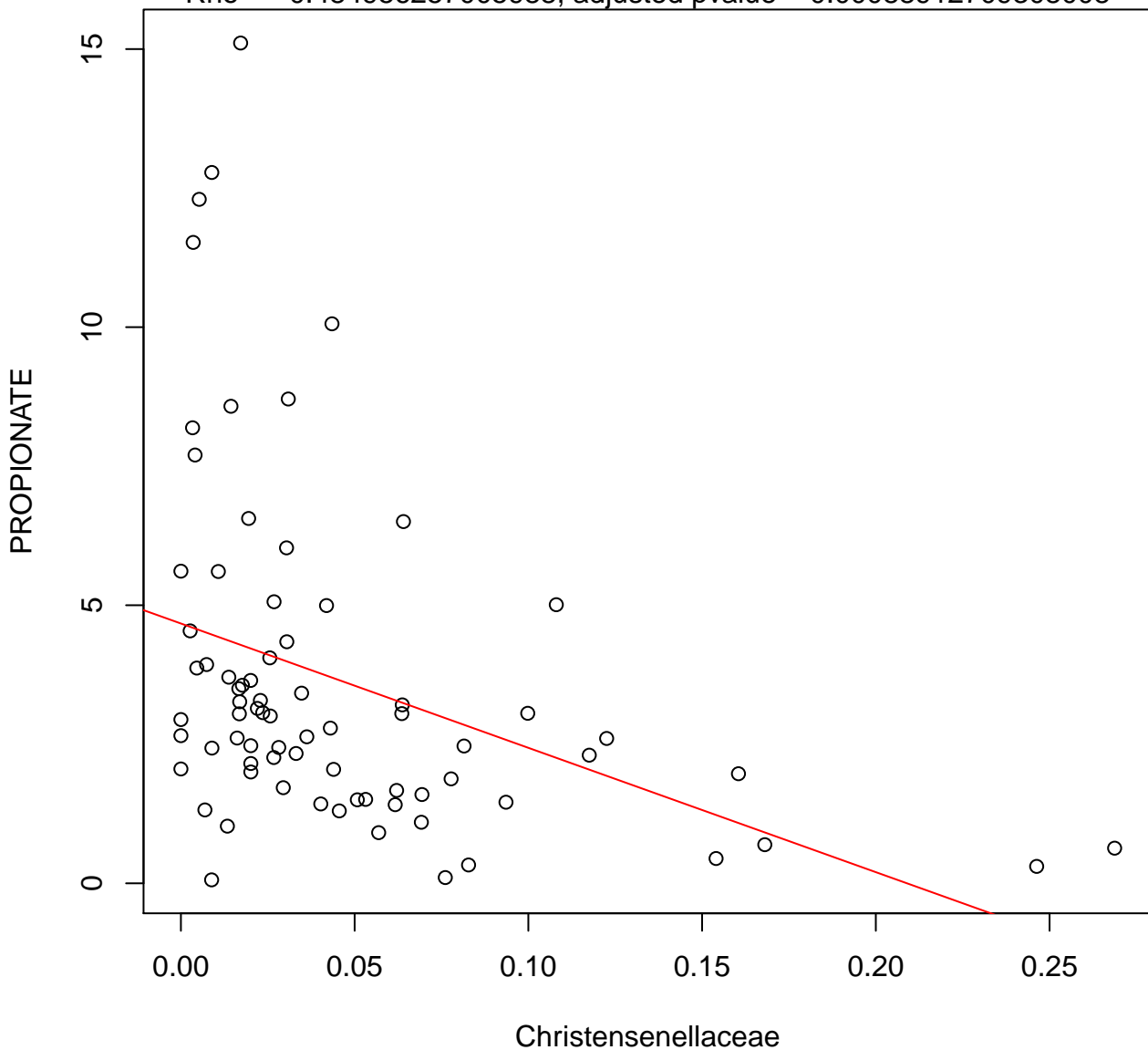
Rho =  $-0.361394025604552$ , adjusted pvalue =  $0.0123728681482501$





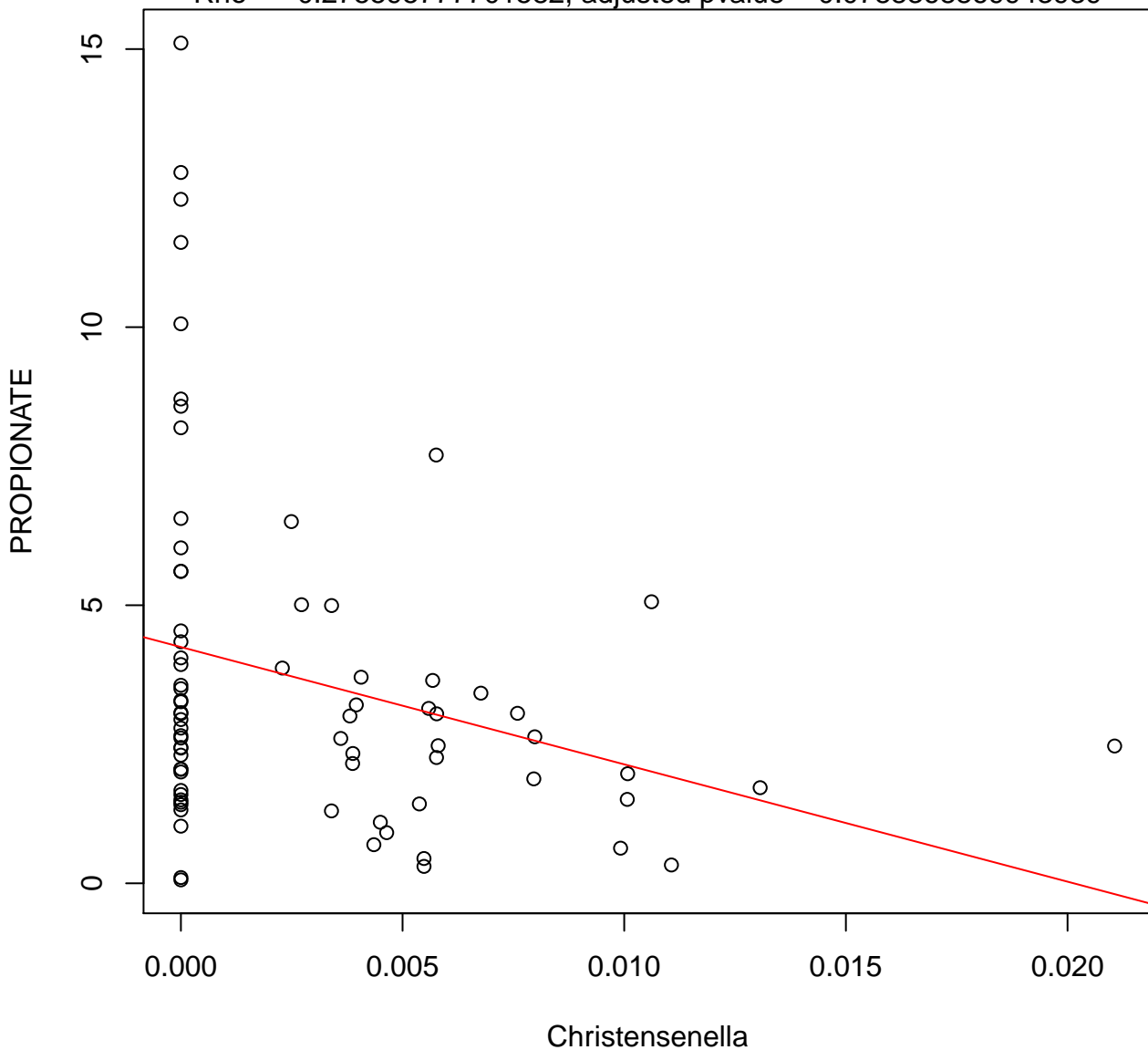
# Timepoint 2 , PROPIONATE ~ Christensenellaceae

Rho =  $-0.484956257005988$ , adjusted pvalue =  $0.00088912709308008$



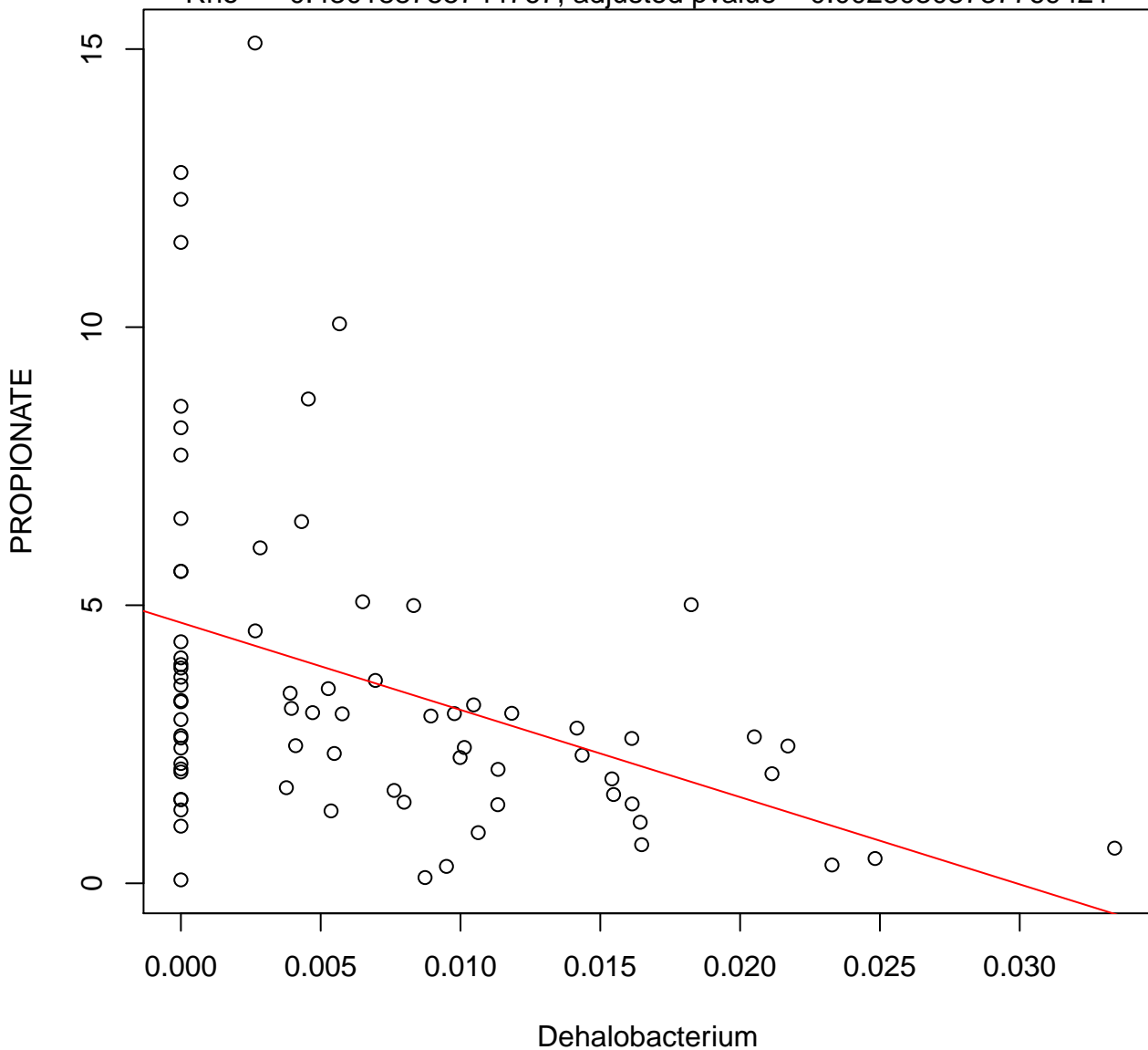
# Timepoint 2 , PROPIONATE ~ Christensenella

Rho =  $-0.275595777701582$ , adjusted pvalue =  $0.0788368869943939$



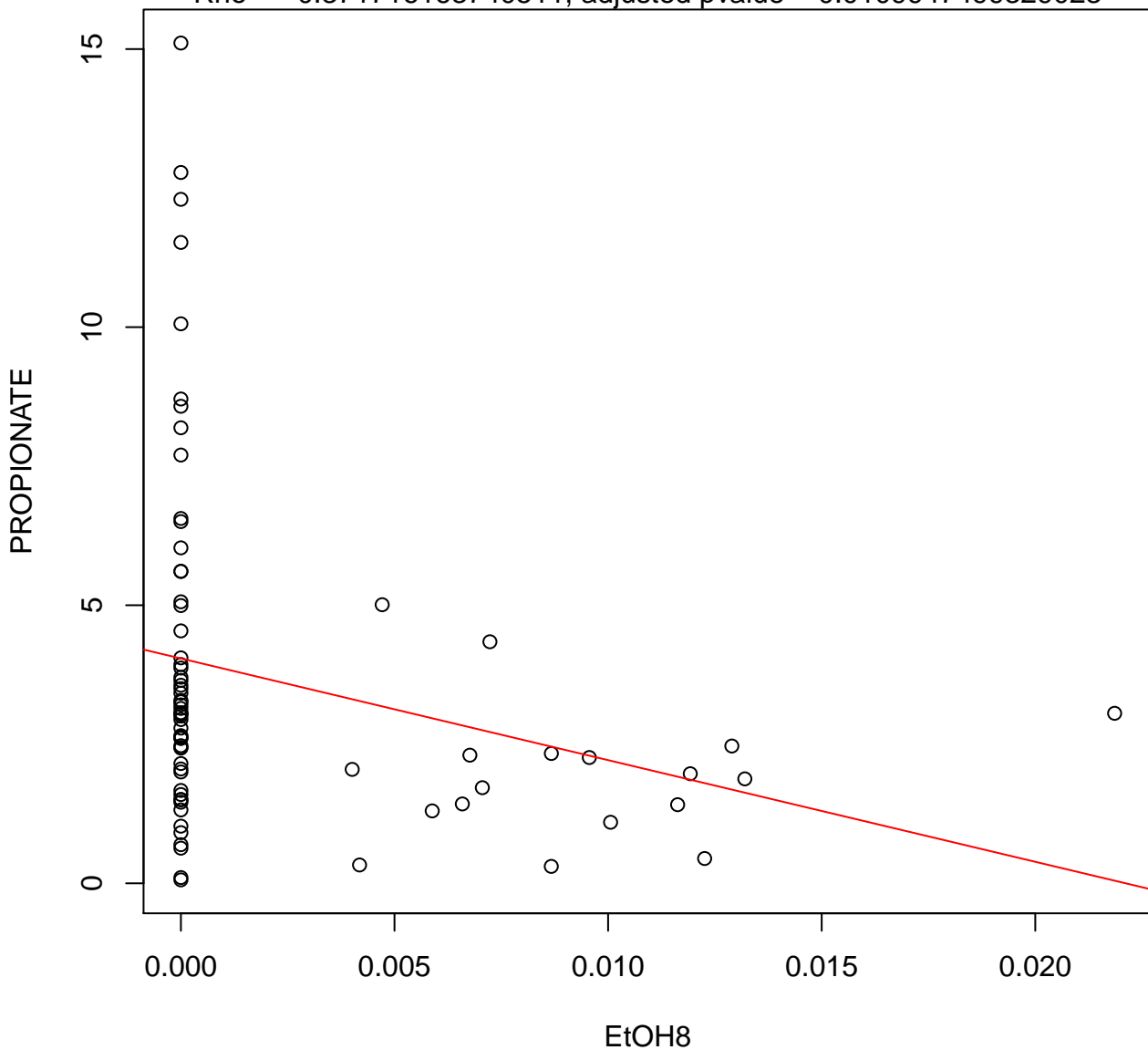
# Timepoint 2 , PROPIONATE ~ Dehalobacterium

Rho =  $-0.430188755744767$ , adjusted pvalue =  $0.00230303737769421$



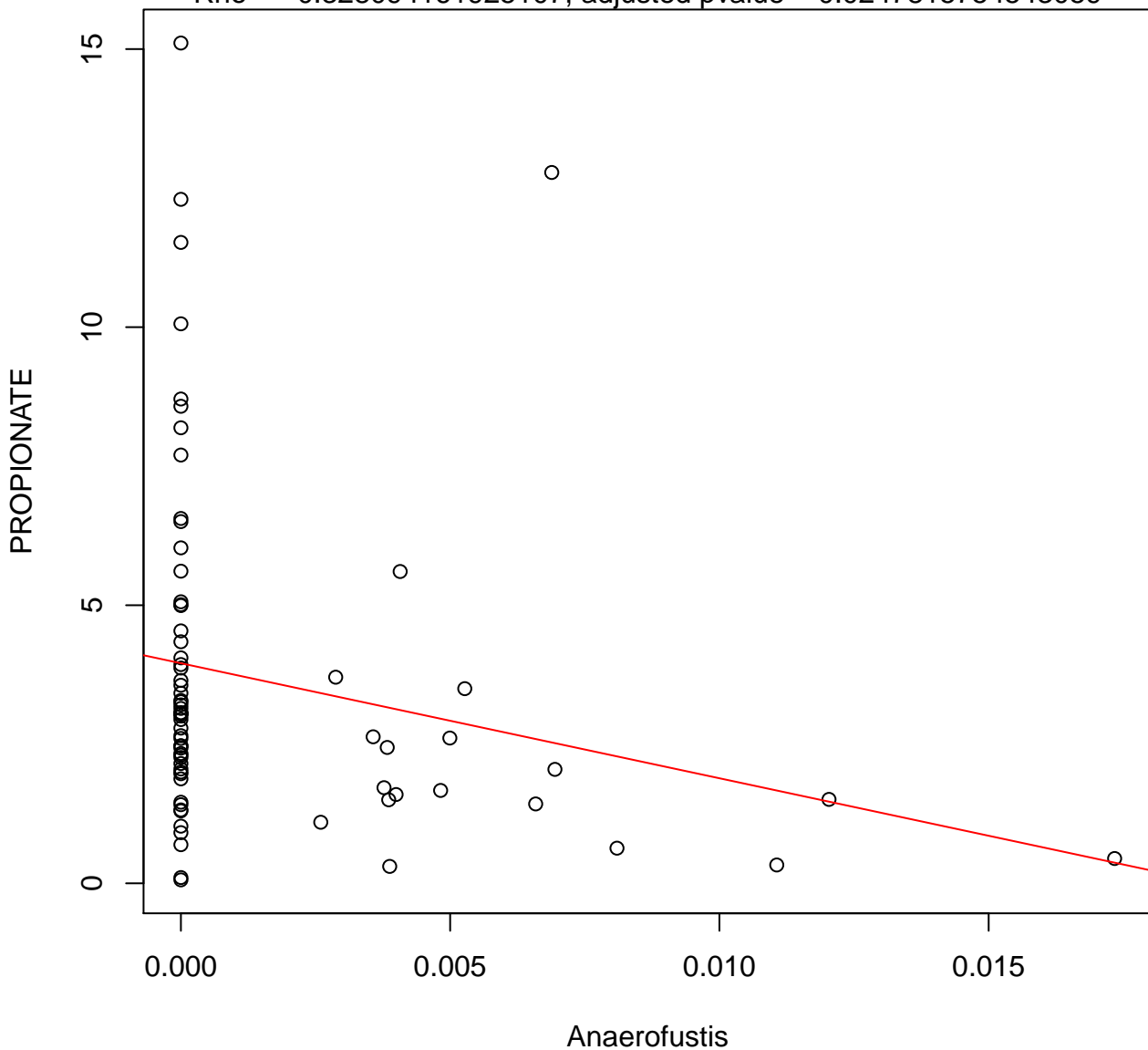
## Timepoint 2 , PROPIONATE ~ EtOH8

Rho =  $-0.371716163740511$ , adjusted pvalue =  $0.0109947499329023$



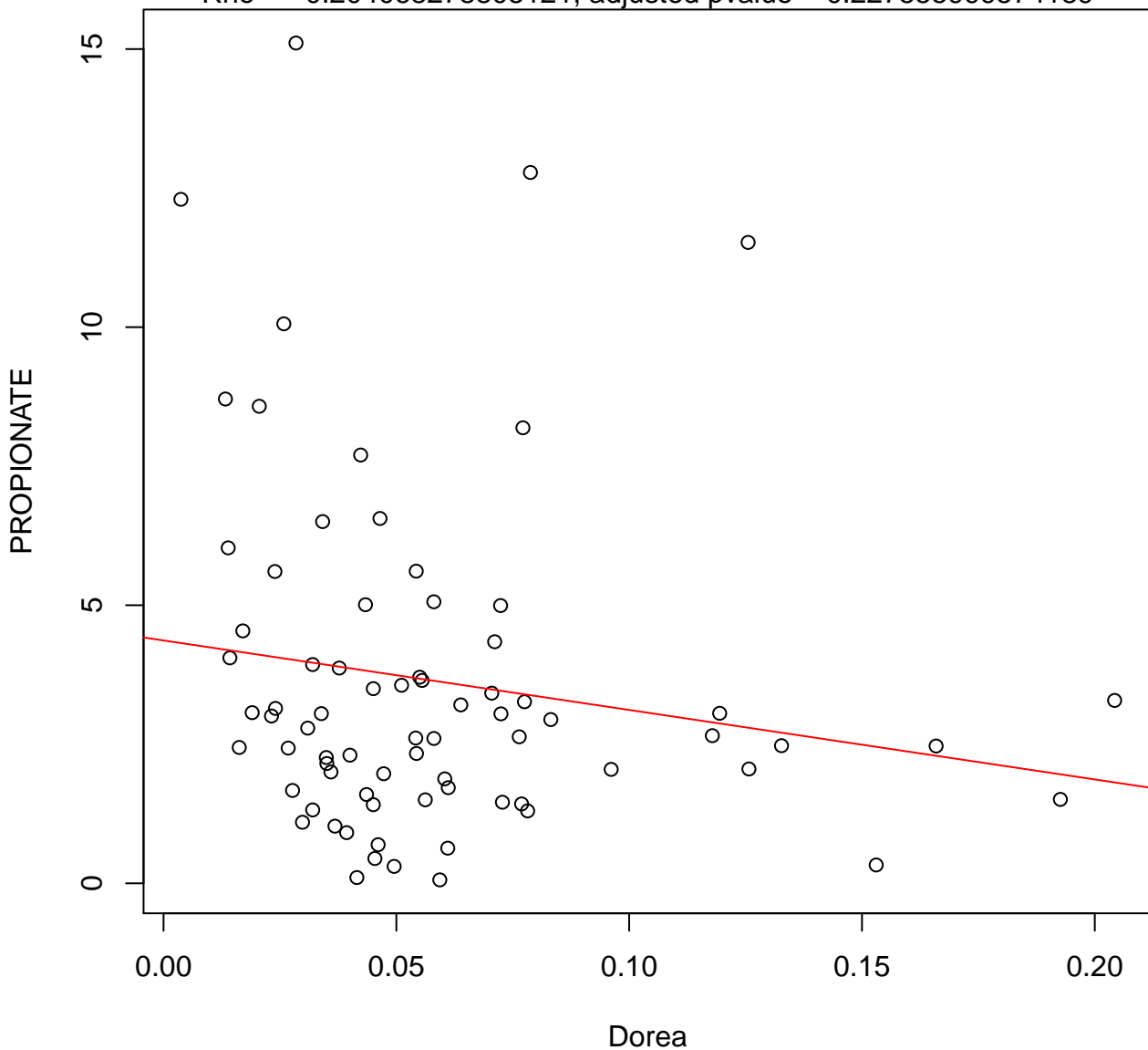
# Timepoint 2 , PROPIONATE ~ Anaerofustis

Rho =  $-0.328094161925107$ , adjusted pvalue =  $0.0247815754543059$



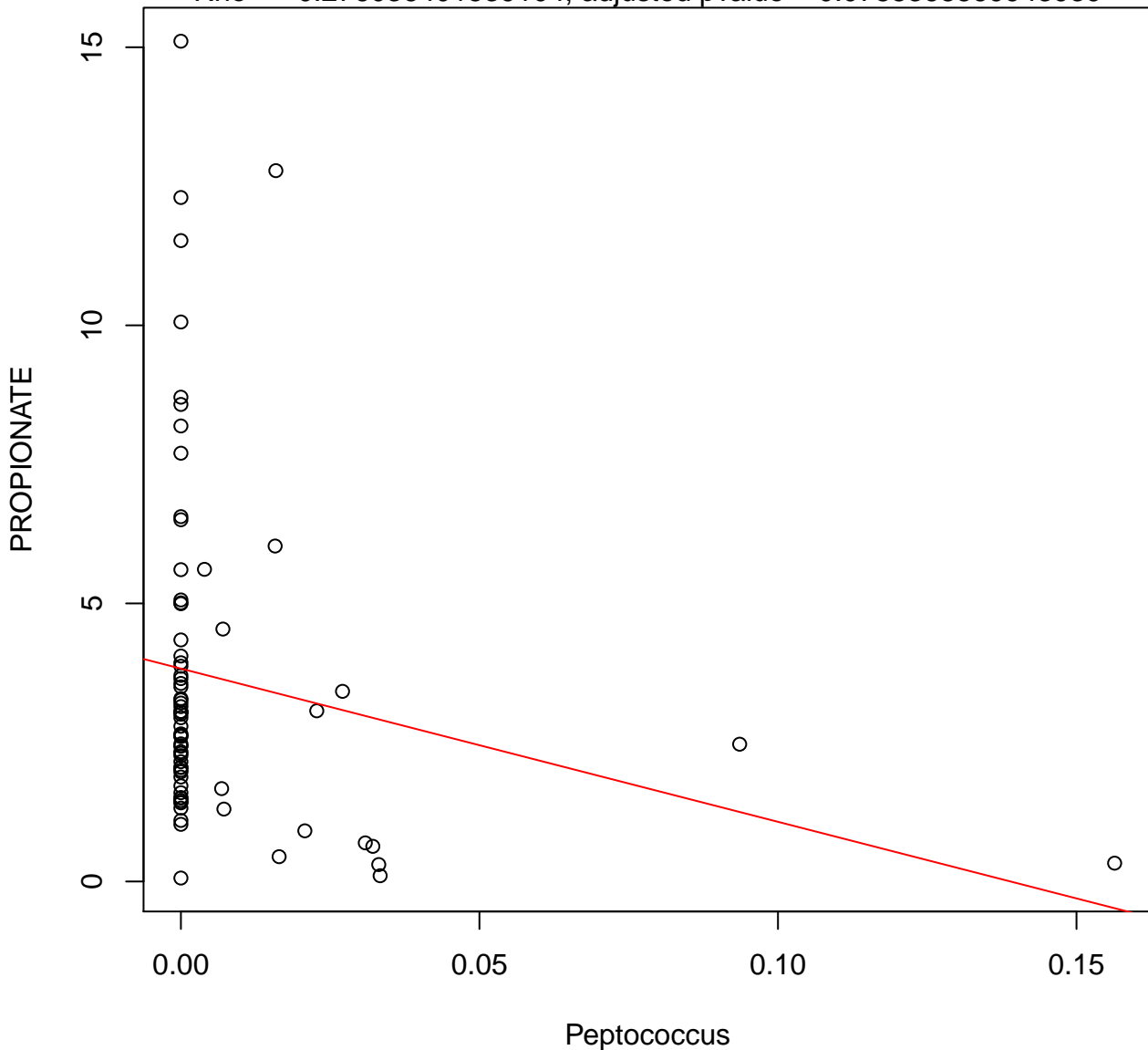
## Timepoint 2 , PROPIONATE ~ Dorea

Rho =  $-0.204068278805121$ , adjusted pvalue =  $0.227555999574189$



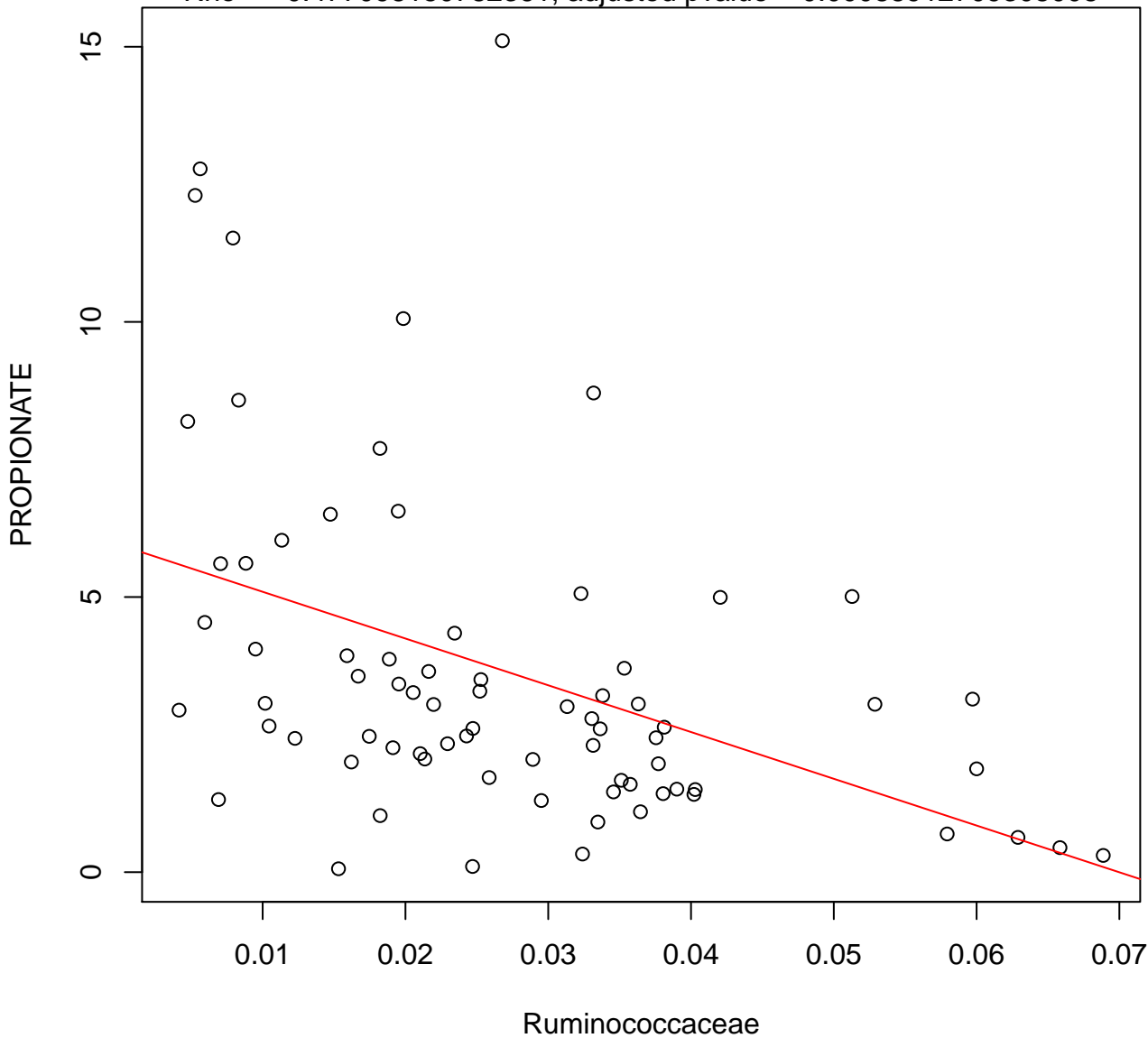
# Timepoint 2 , PROPIONATE ~ Peptococcus

Rho =  $-0.276036401539104$ , adjusted pvalue =  $0.0788368869943939$



# Timepoint 2 , PROPIONATE ~ Ruminococcaceae

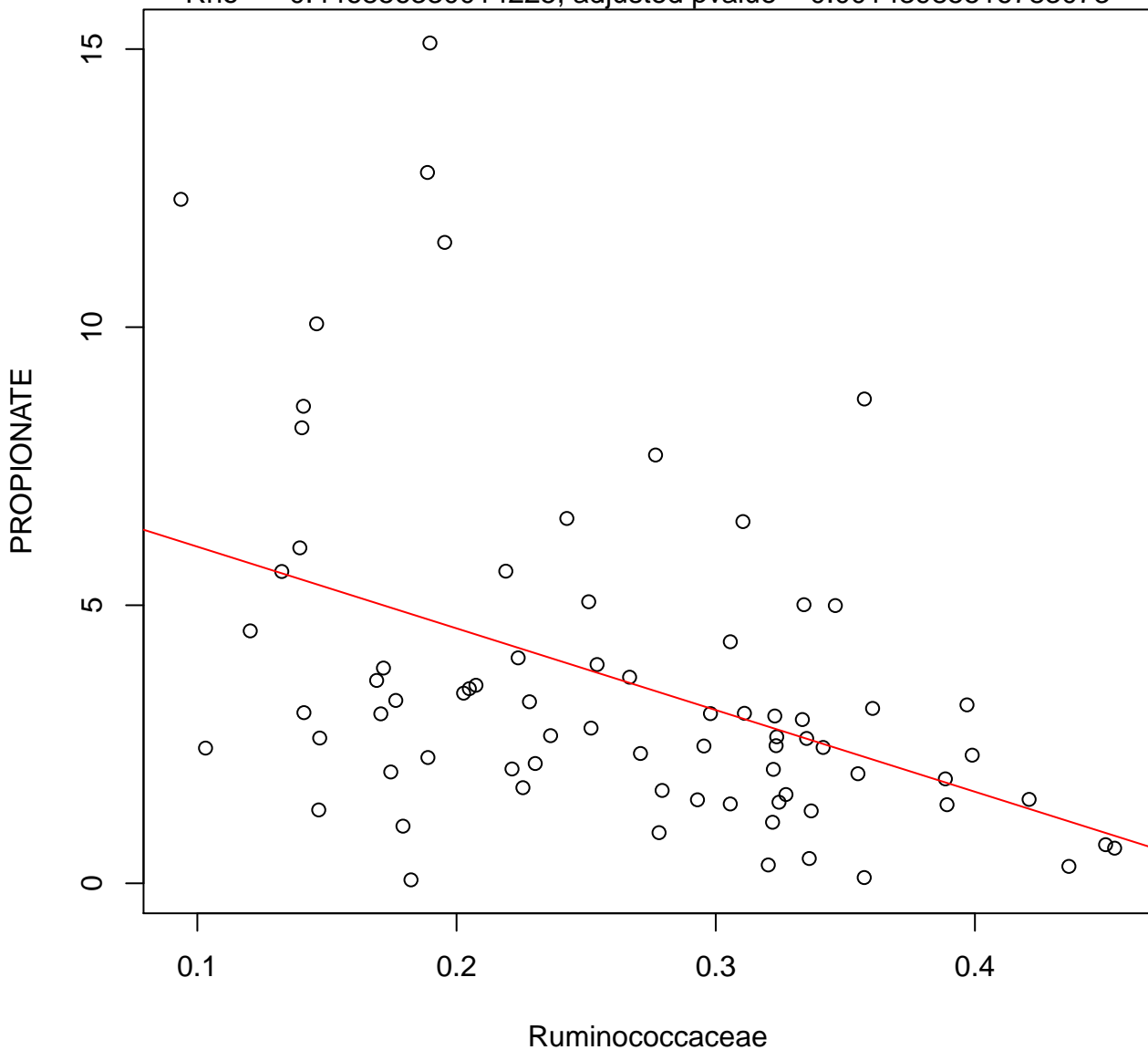
Rho =  $-0.477098150782361$ , adjusted pvalue =  $0.00088912709308008$





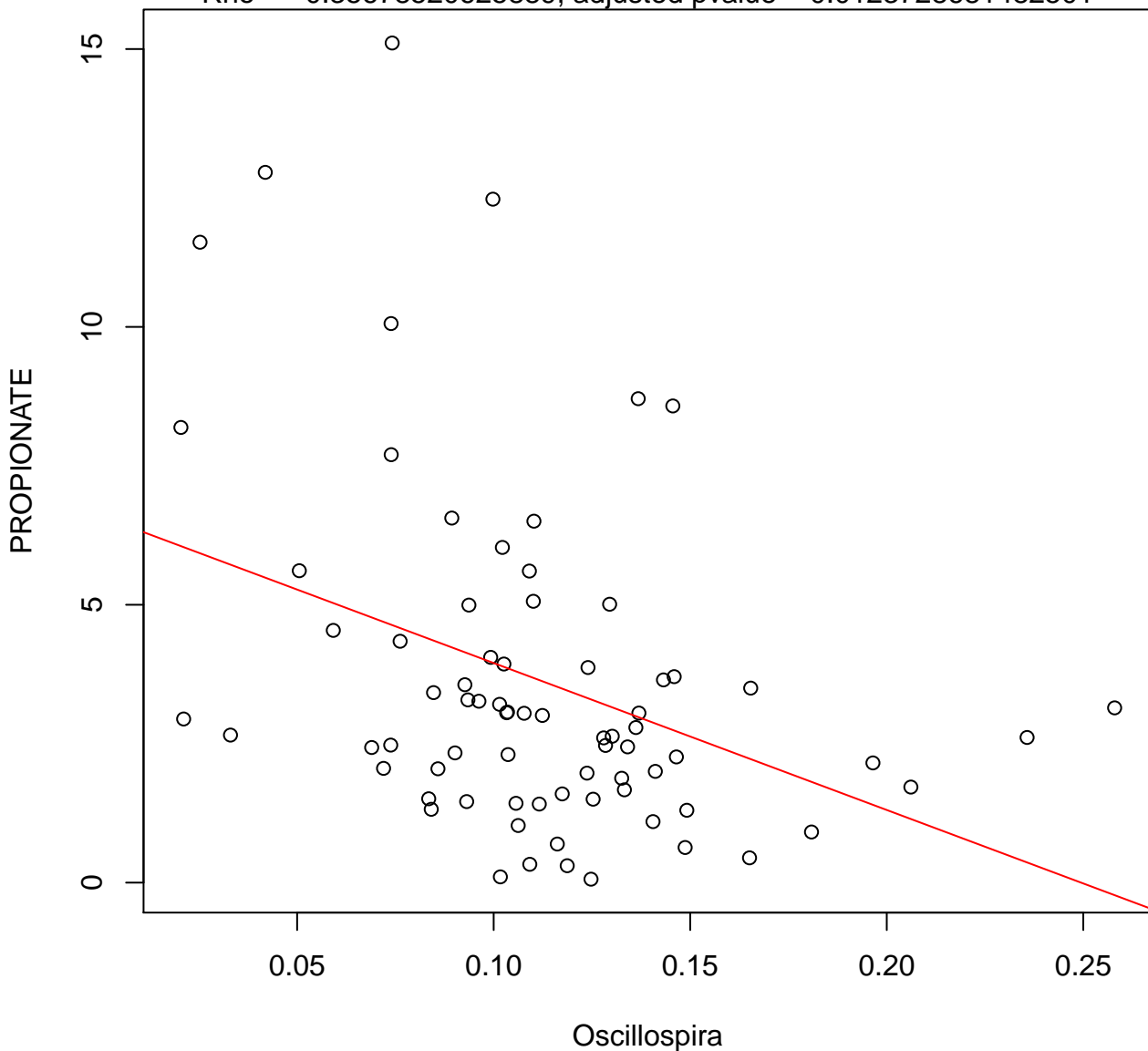
# Timepoint 2 , PROPIONATE ~ Ruminococcaceae

Rho =  $-0.446856330014225$ , adjusted pvalue =  $0.00143985516783073$



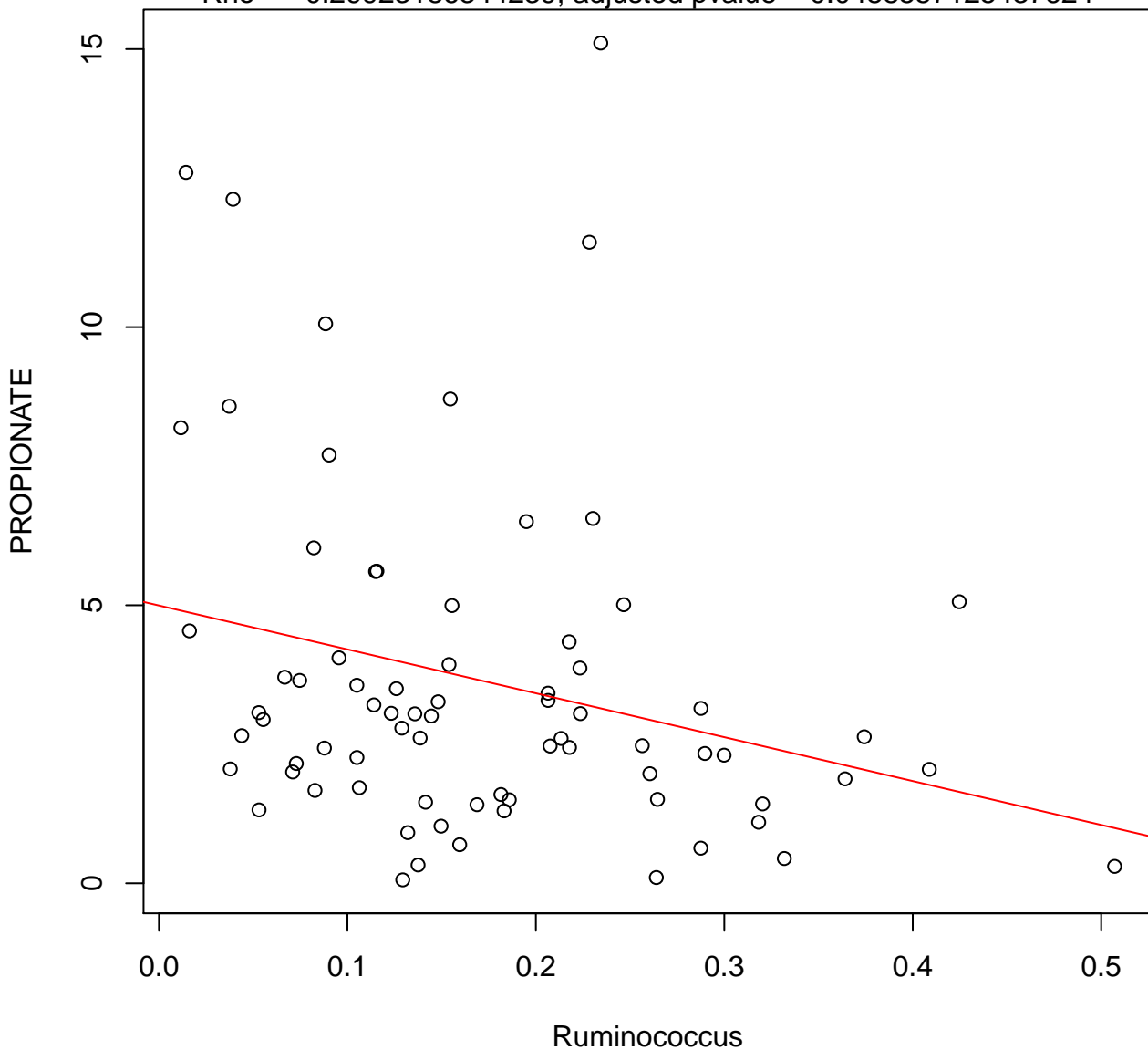
## Timepoint 2 , PROPIONATE ~ Oscillospira

Rho =  $-0.35678520625889$ , adjusted pvalue =  $0.0123728681482501$



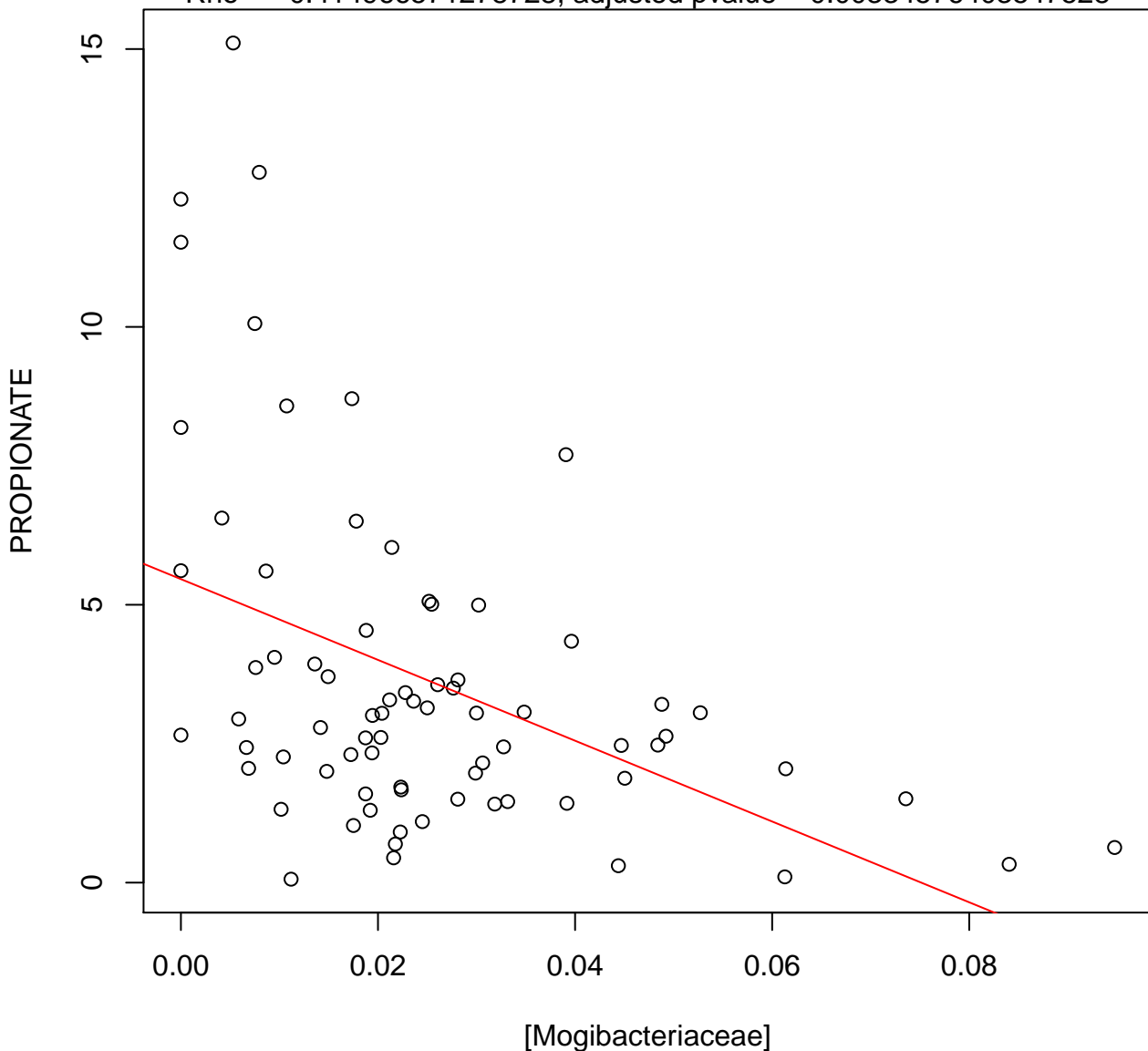
# Timepoint 2 , PROPIONATE ~ Ruminococcus

Rho = -0.29923186344239, adjusted pvalue = 0.0488557125437624



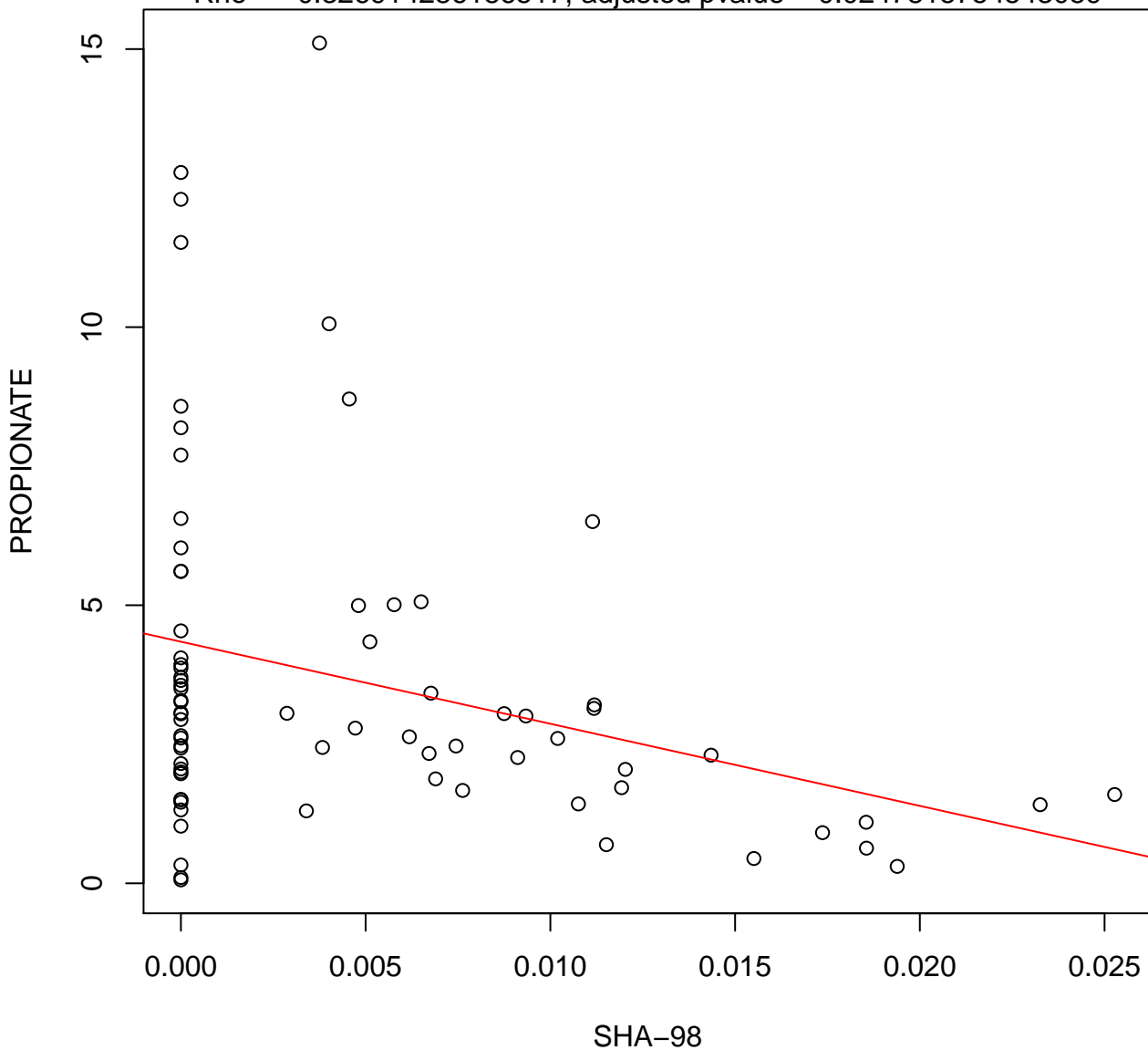
# Timepoint 2 , PROPIONATE ~ [Mogibacteriaceae]

Rho =  $-0.414966571278728$ , adjusted pvalue =  $0.00334576403547528$



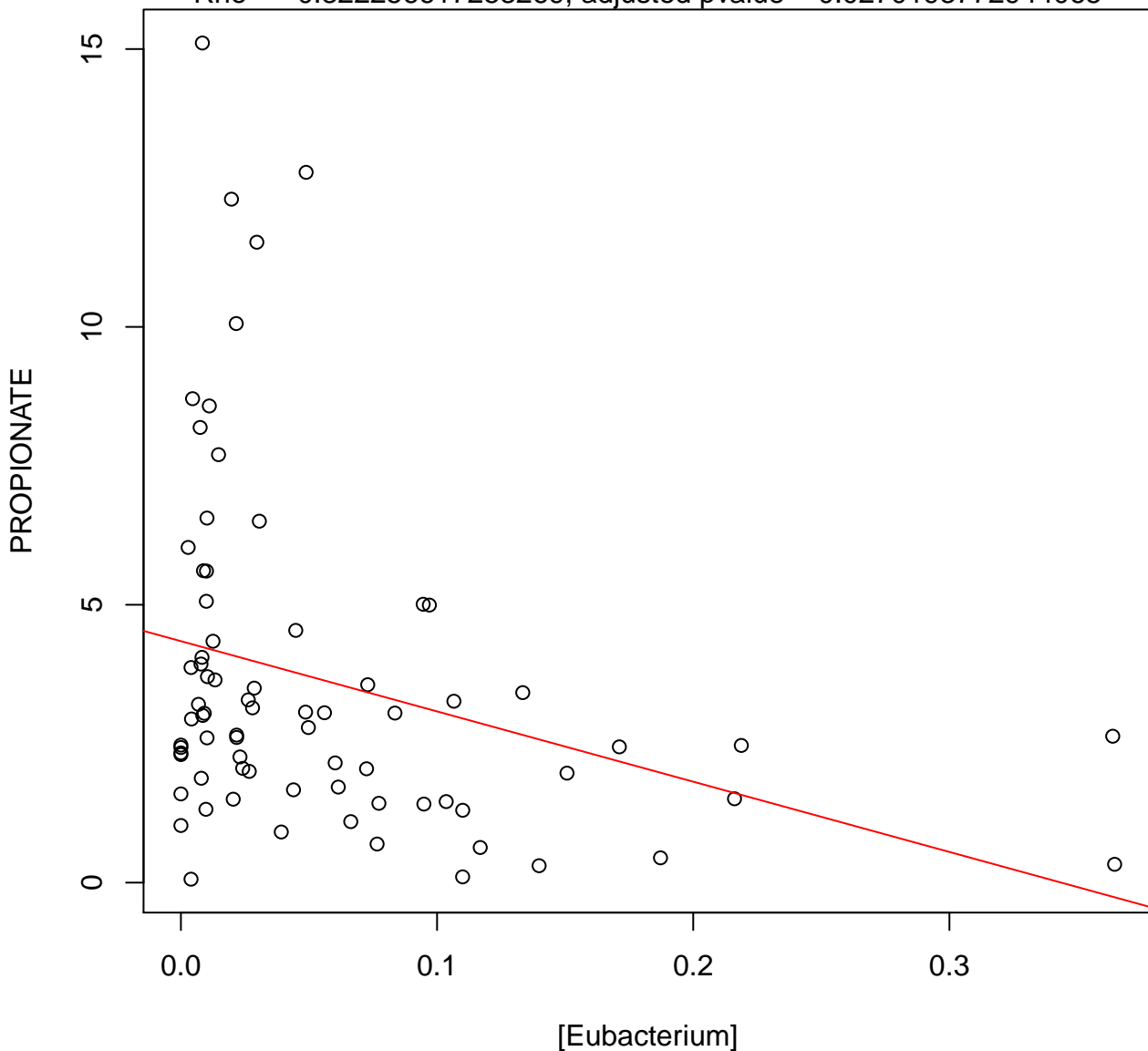
# Timepoint 2 , PROPIONATE ~ SHA-98

Rho =  $-0.326914286186517$ , adjusted pvalue =  $0.0247815754543059$



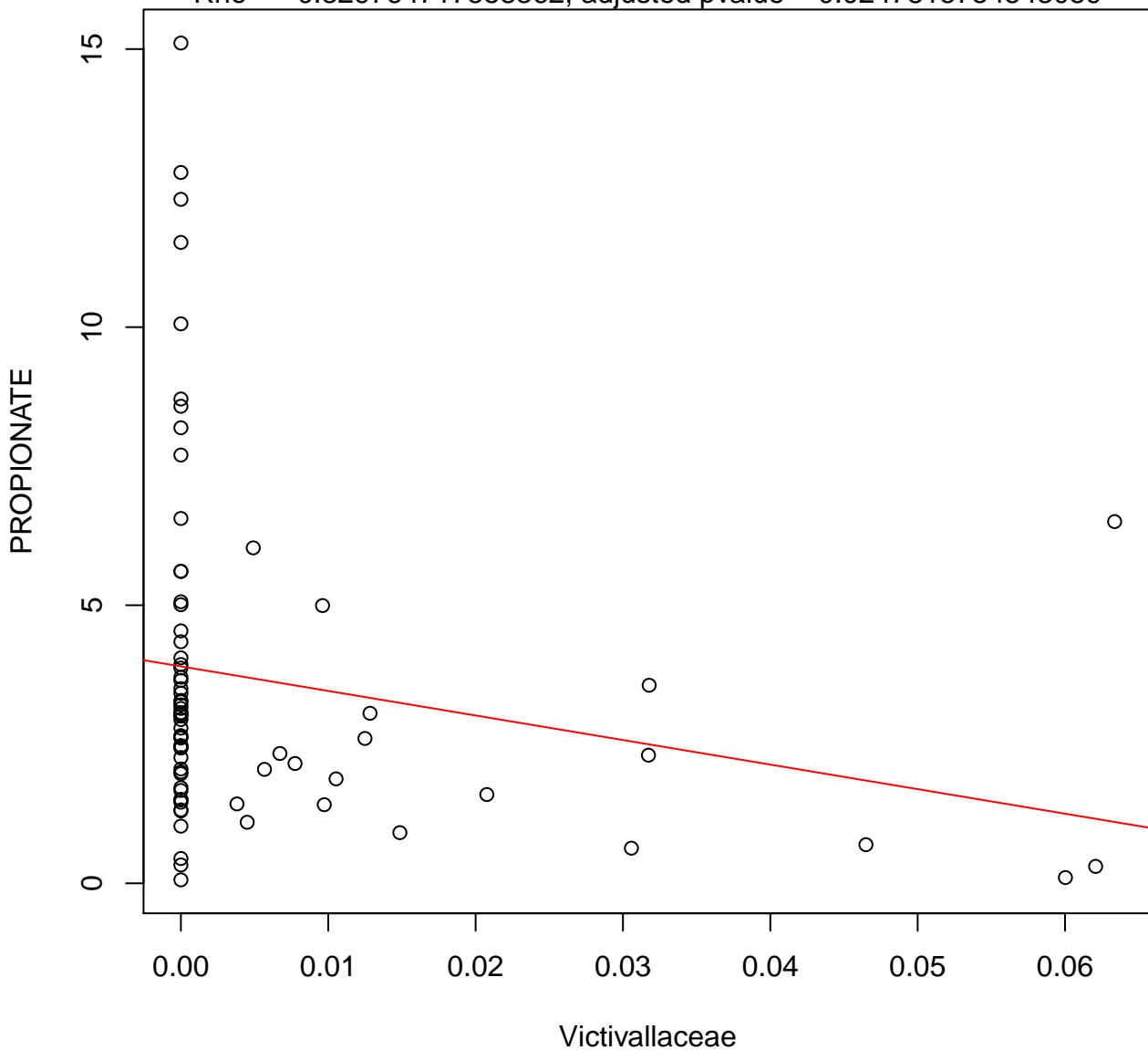
# Timepoint 2 , PROPIONATE ~ [Eubacterium]

Rho =  $-0.322256617253269$ , adjusted pvalue =  $0.0270193772944065$



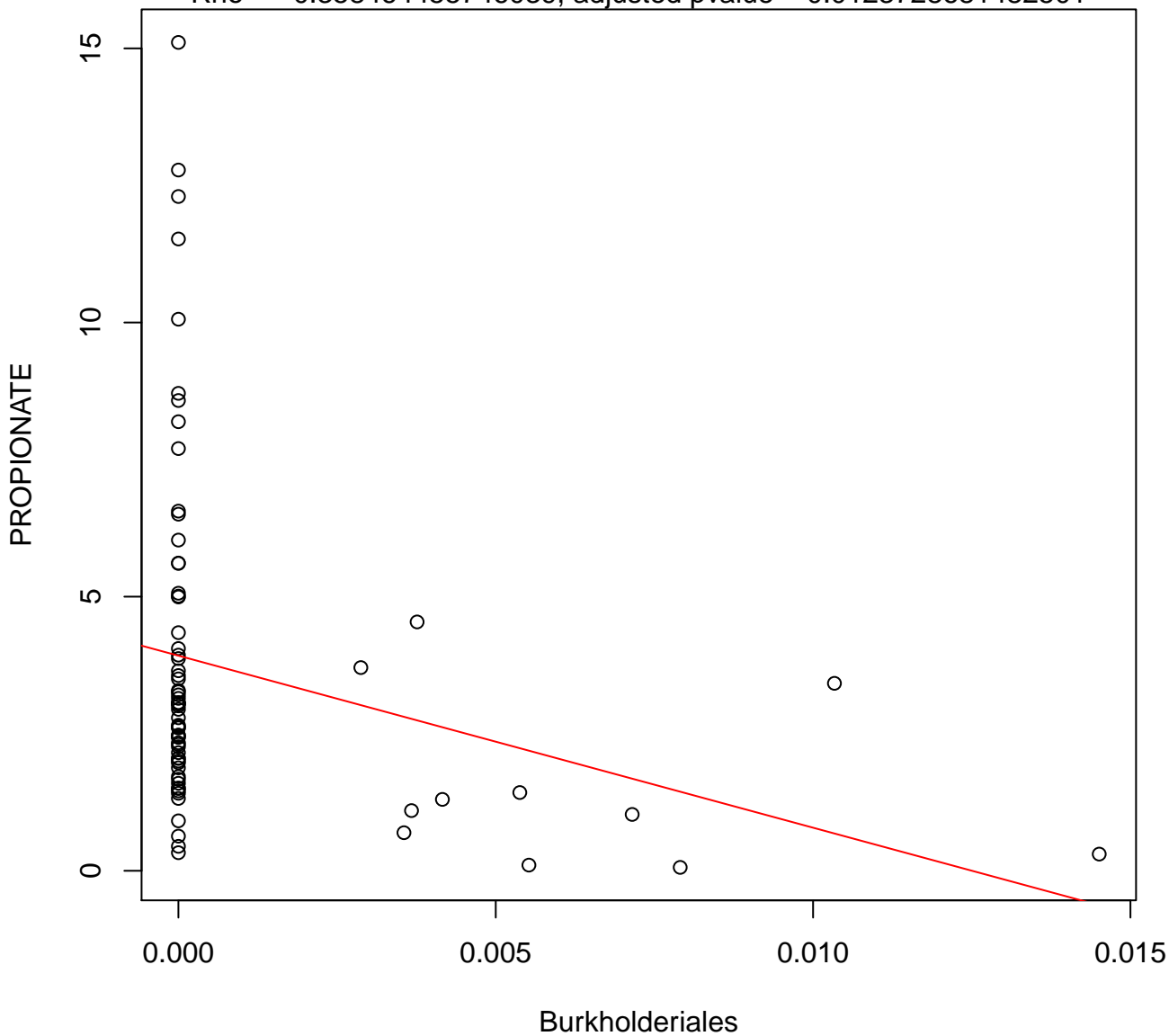
# Timepoint 2 , PROPIONATE ~ Victivallaceae

Rho =  $-0.329764717558362$ , adjusted pvalue =  $0.0247815754543059$



# Timepoint 2 , PROPIONATE ~ Burkholderiales

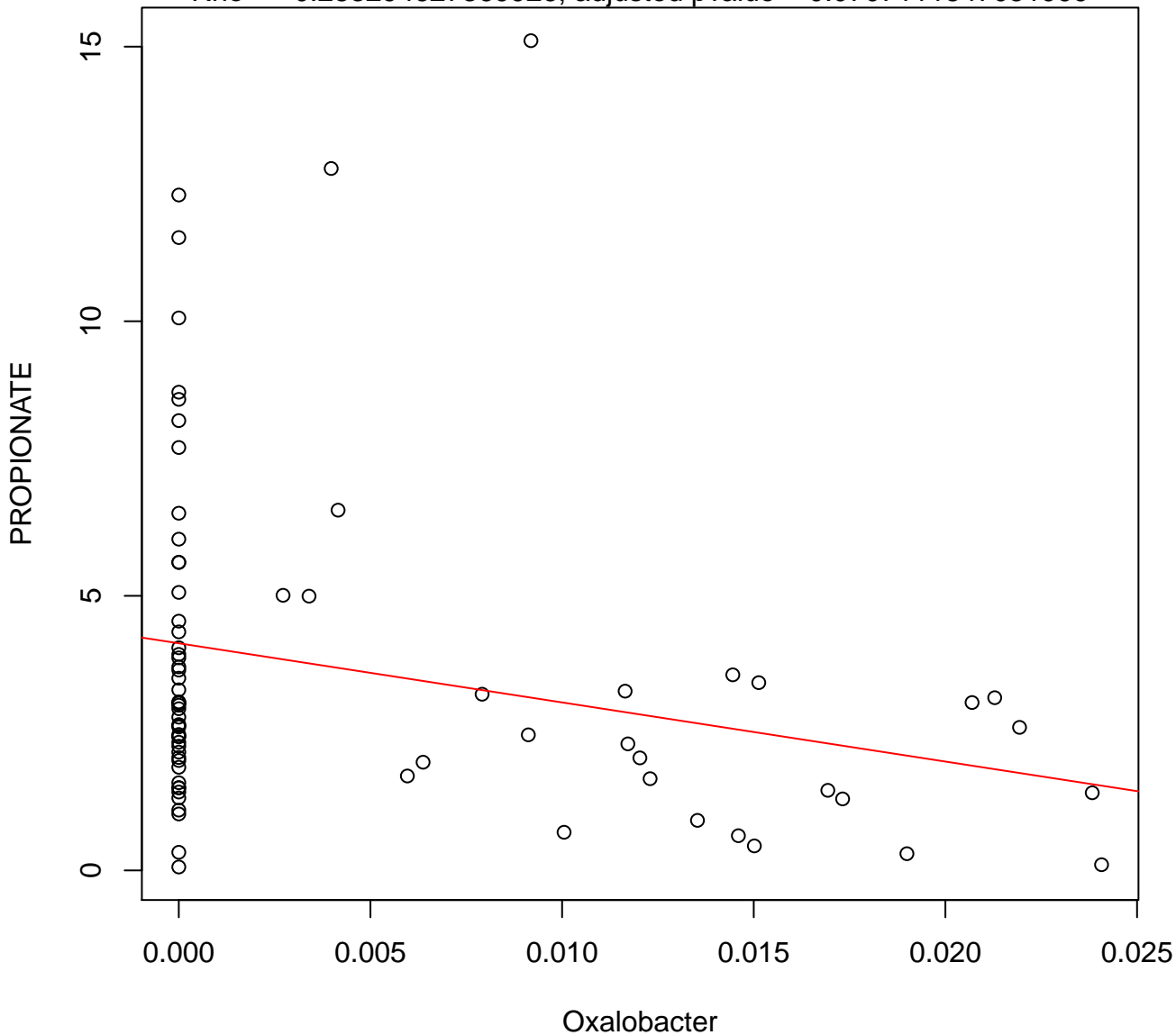
Rho =  $-0.358464455746039$ , adjusted pvalue =  $0.0123728681482501$





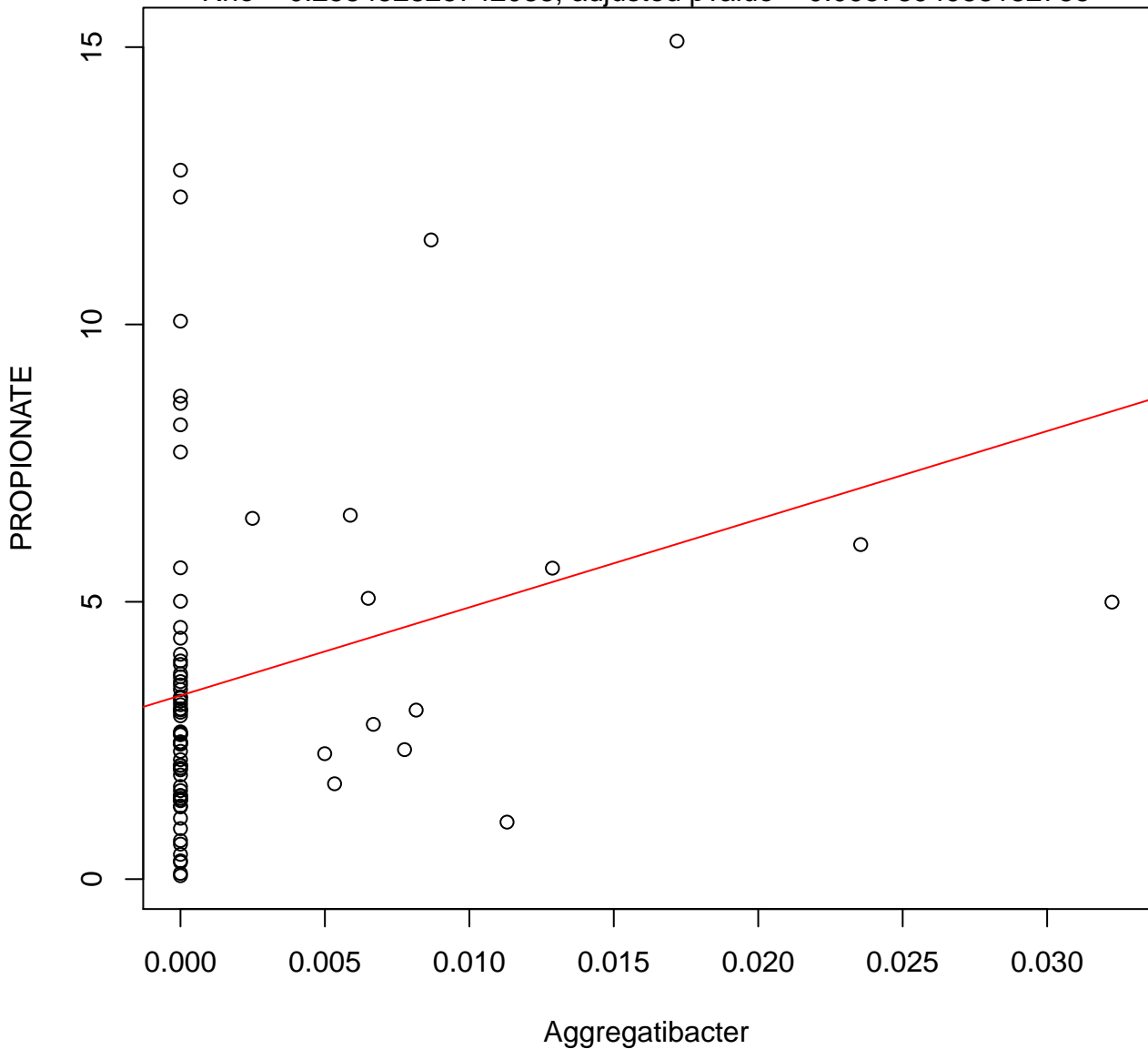
# Timepoint 2 , PROPIONATE ~ Oxalobacter

Rho =  $-0.283294627369926$ , adjusted pvalue =  $0.0707111847051999$



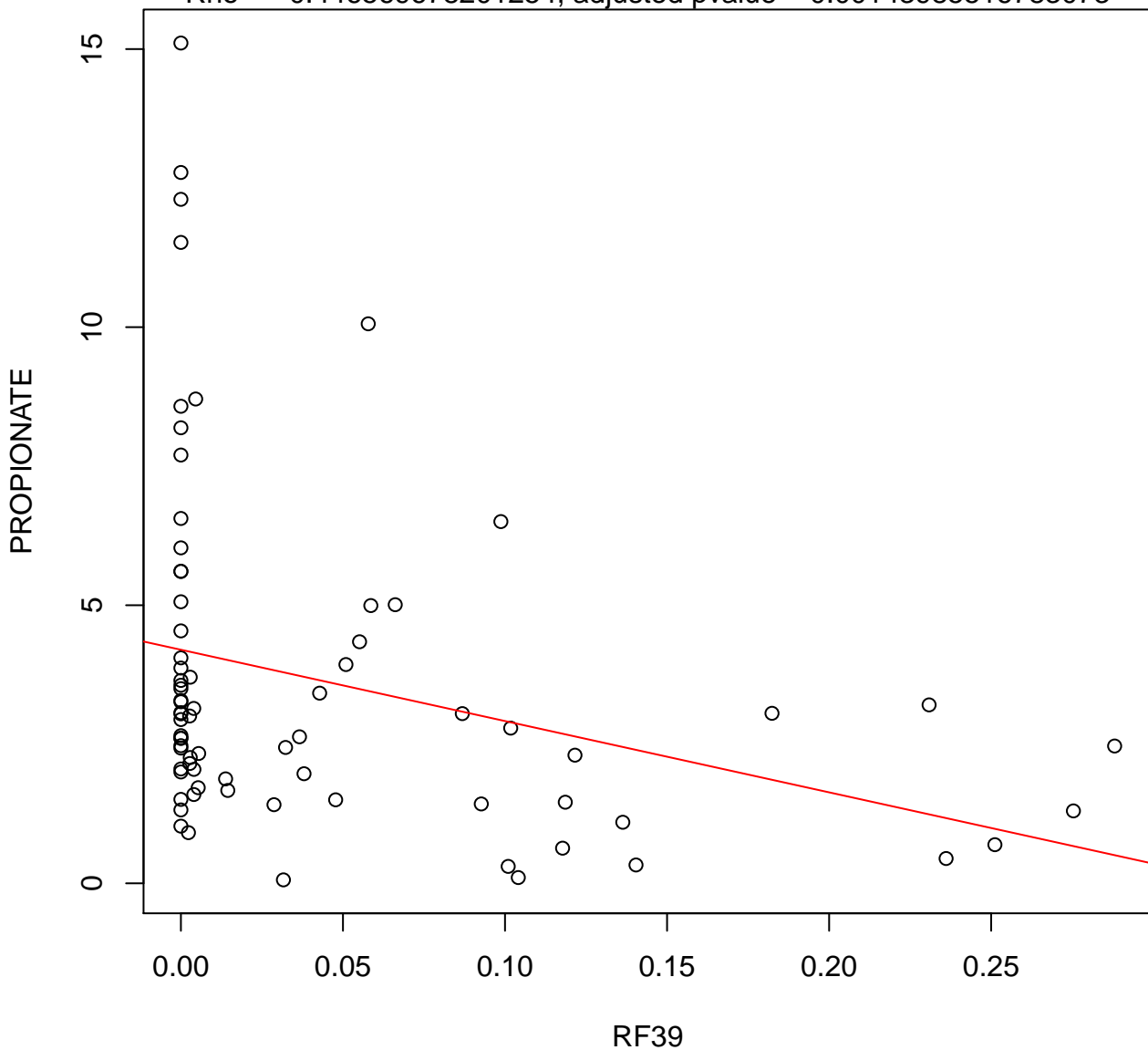
# Timepoint 2 , PROPIONATE ~ Aggregatibacter

Rho = 0.258452825742088, adjusted pvalue = 0.0957894988182755



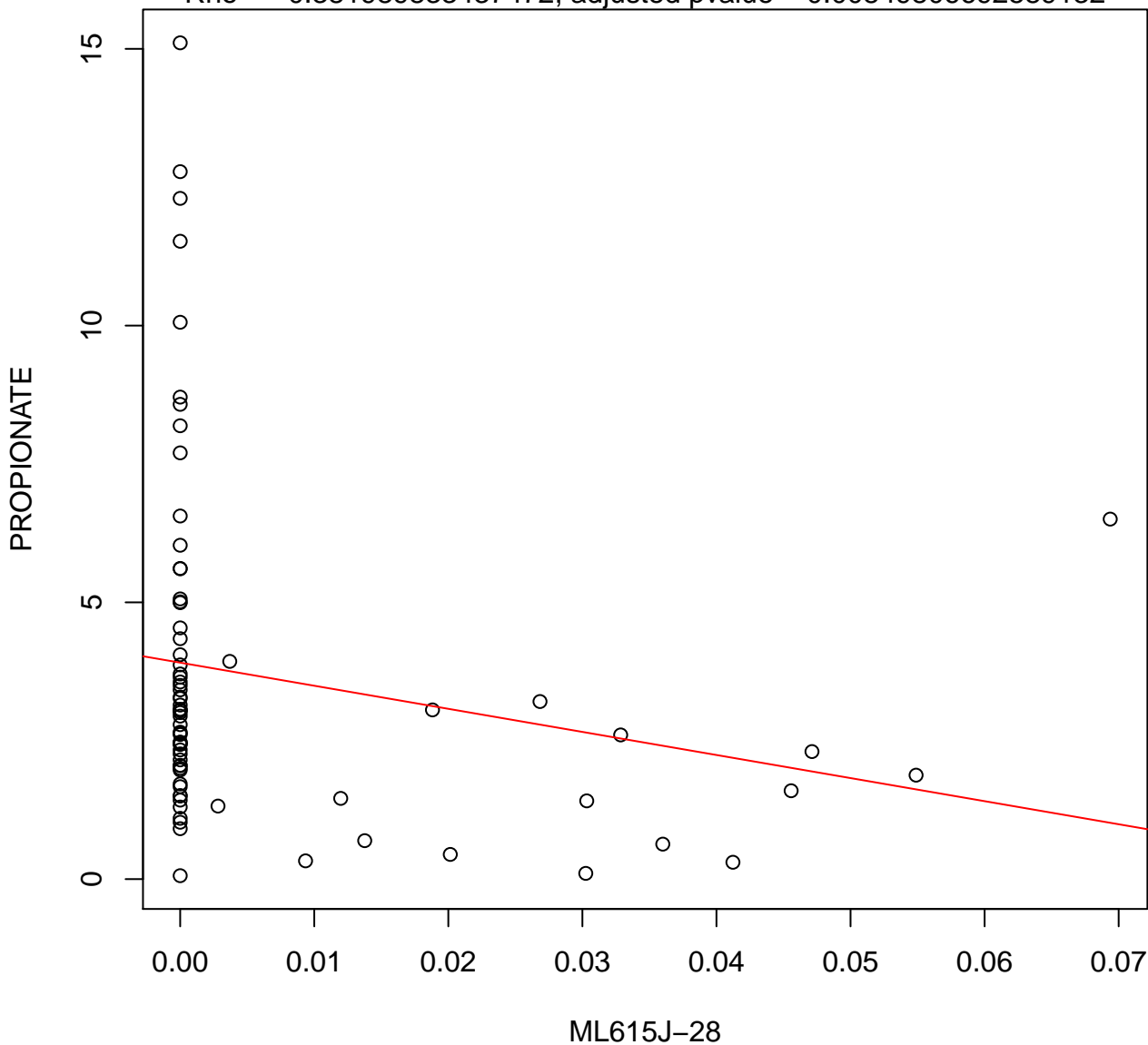
# Timepoint 2 , PROPIONATE ~ RF39

Rho =  $-0.446569678201254$ , adjusted pvalue =  $0.00143985516783073$



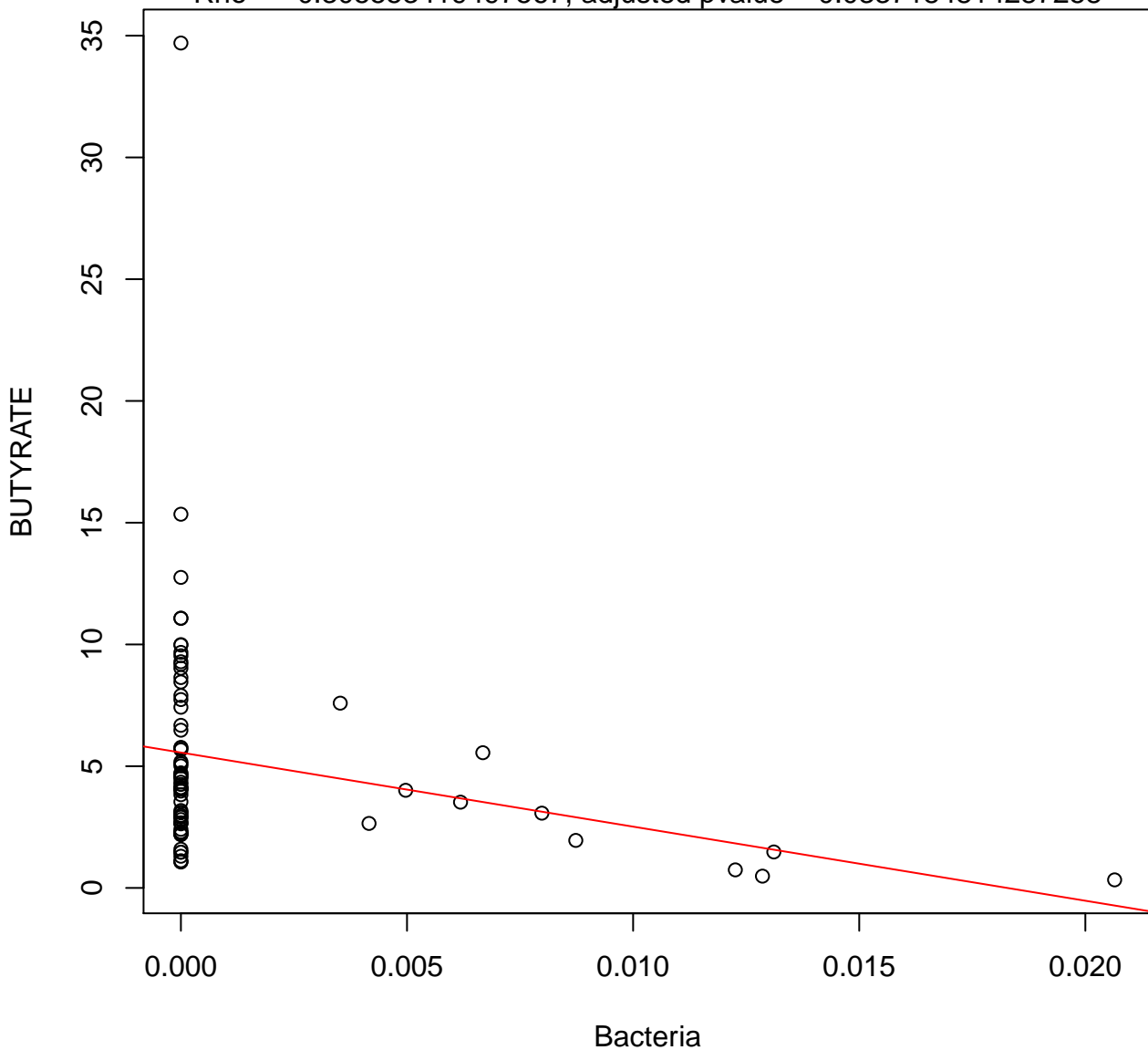
# Timepoint 2 , PROPIONATE ~ ML615J-28

Rho =  $-0.381989833437472$ , adjusted pvalue =  $0.00849806692589132$



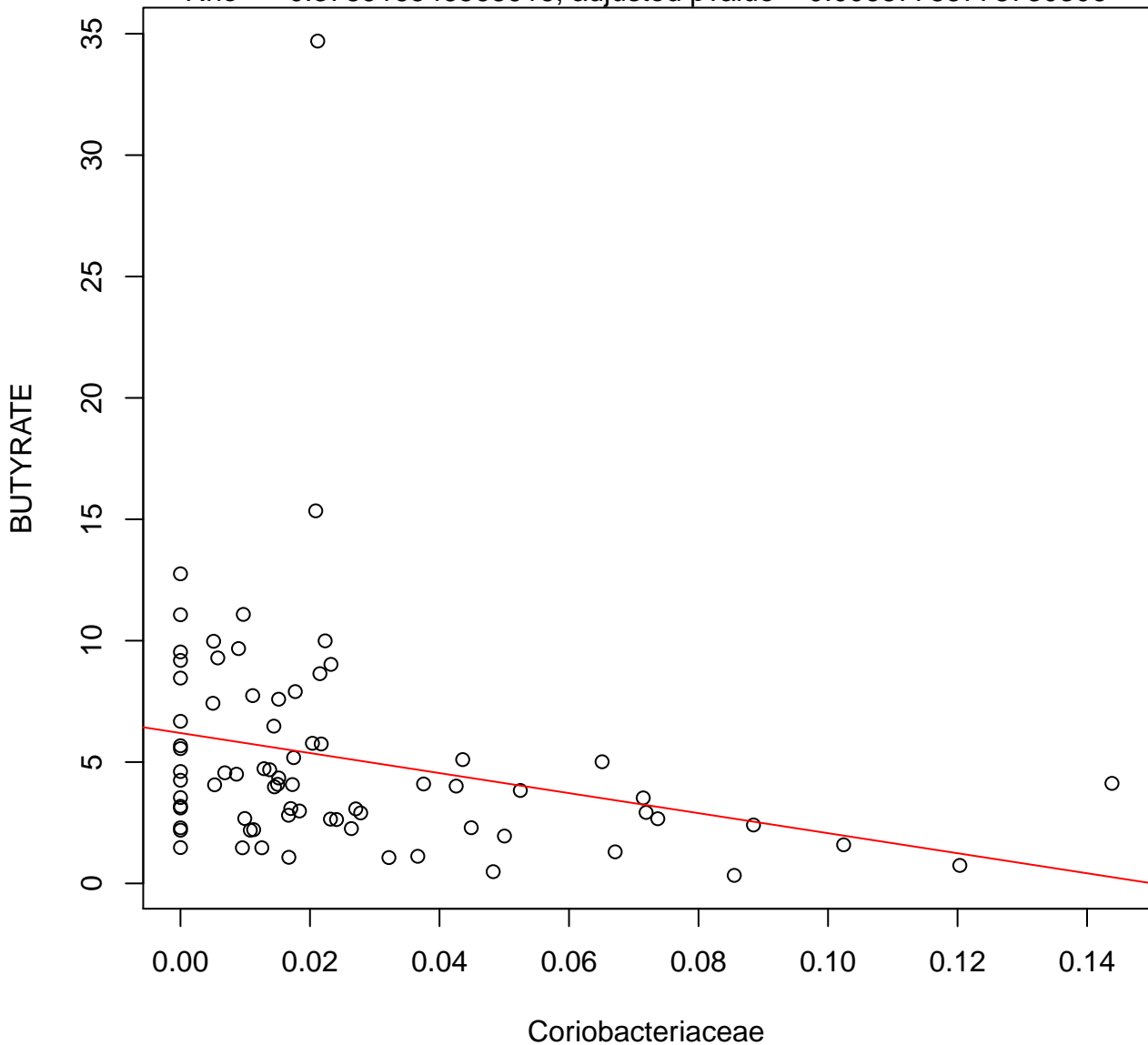
## Timepoint 2 , BUTYRATE ~ Bacteria

Rho =  $-0.305553419497567$ , adjusted pvalue =  $0.0337184814287258$



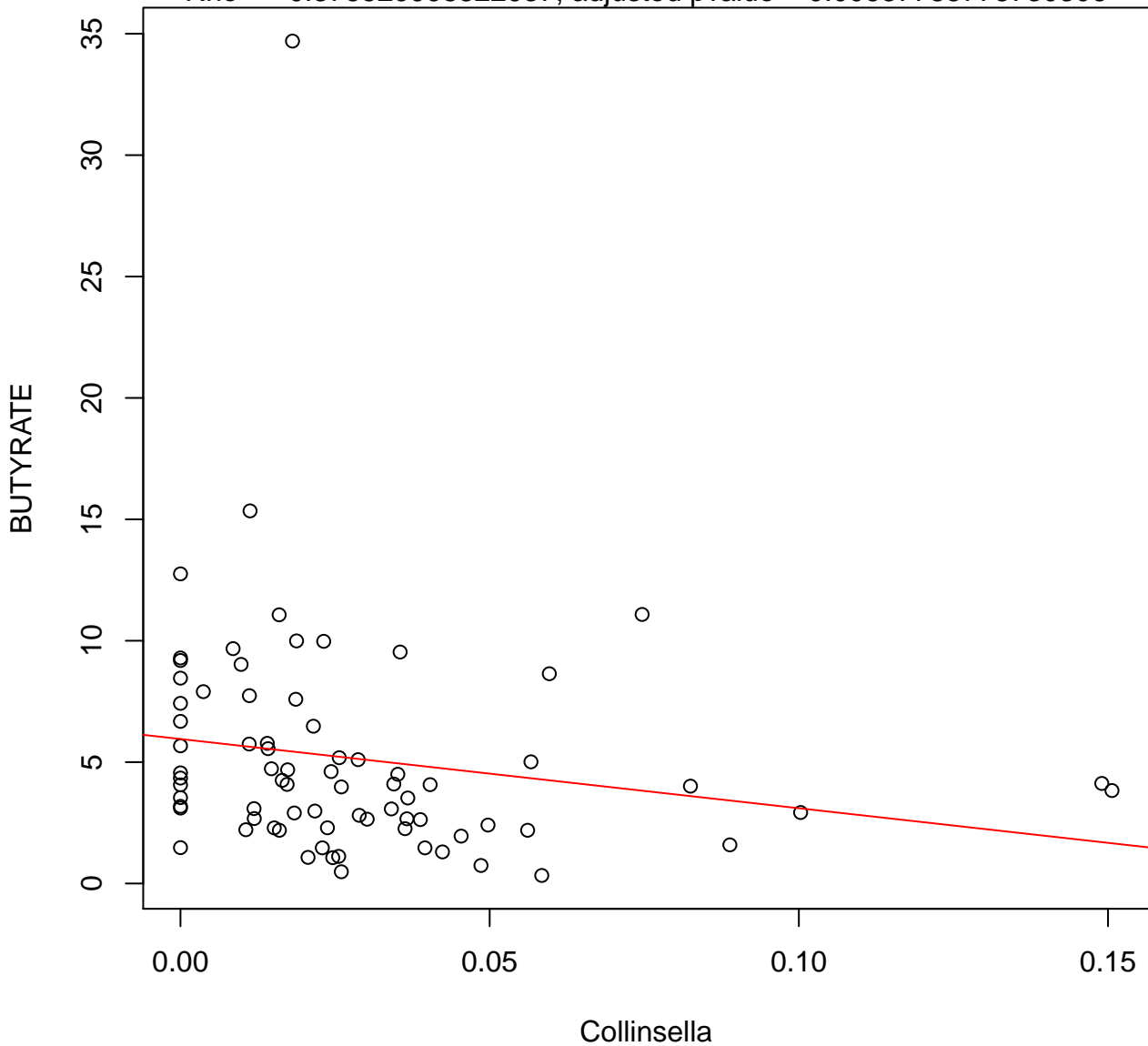
## Timepoint 2 , BUTYRATE ~ Coriobacteriaceae

Rho =  $-0.378916546568916$ , adjusted pvalue =  $0.00687788778730306$



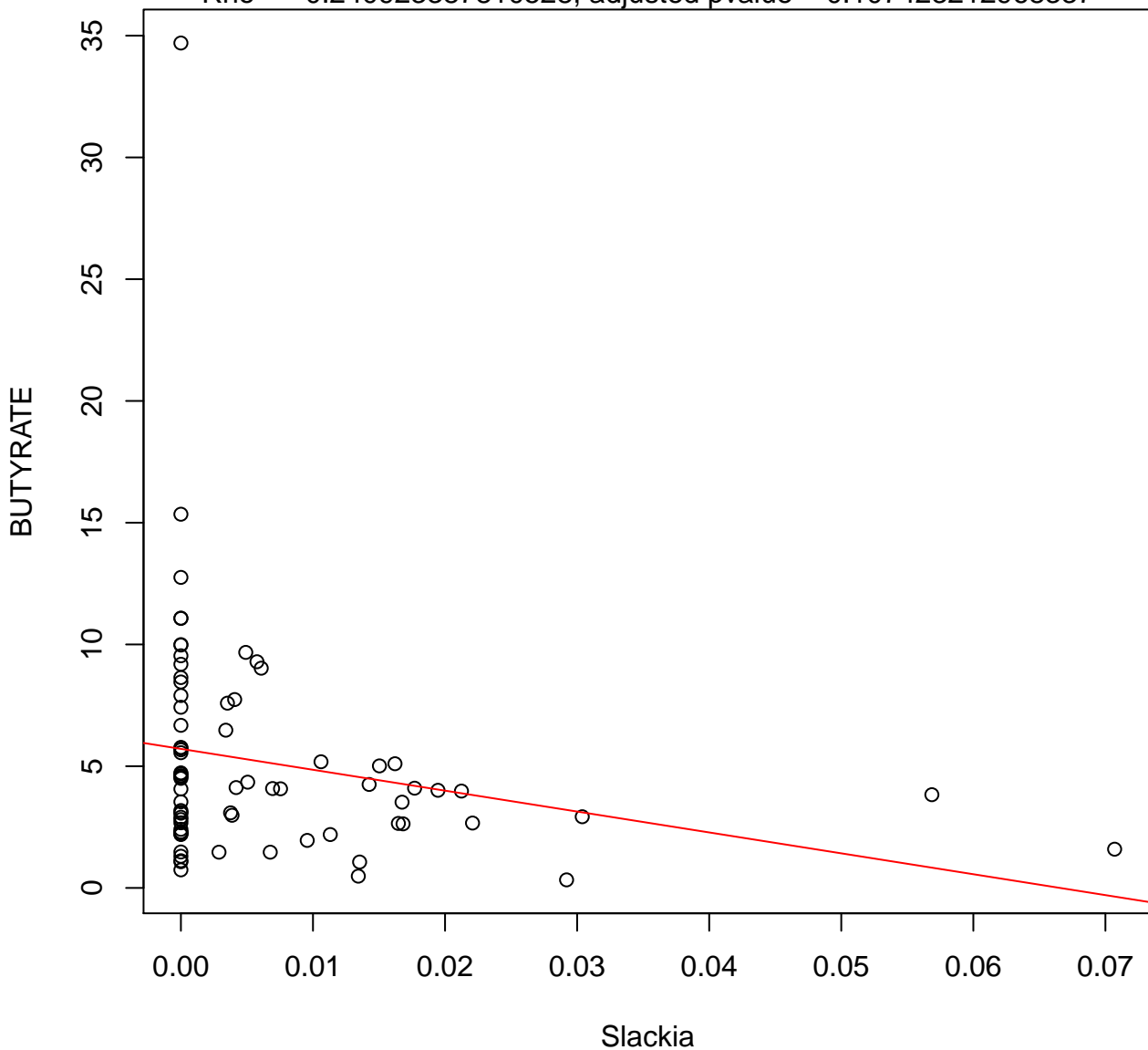
## Timepoint 2 , BUTYRATE ~ Collinsella

Rho =  $-0.375529998822937$ , adjusted pvalue =  $0.00687788778730306$



# Timepoint 2 , BUTYRATE ~ Slackia

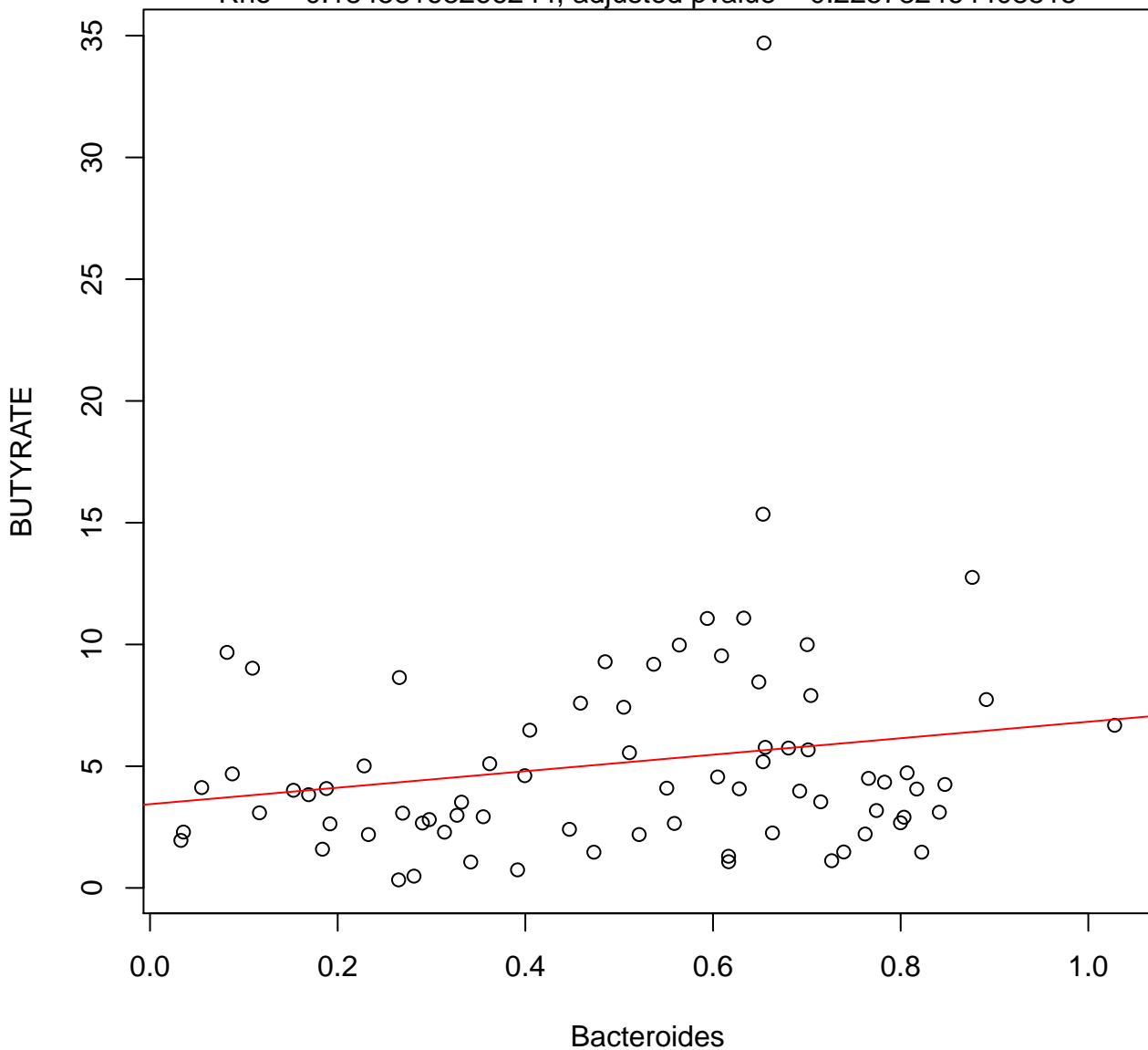
Rho = -0.240923387810528, adjusted pvalue = 0.107423212968337





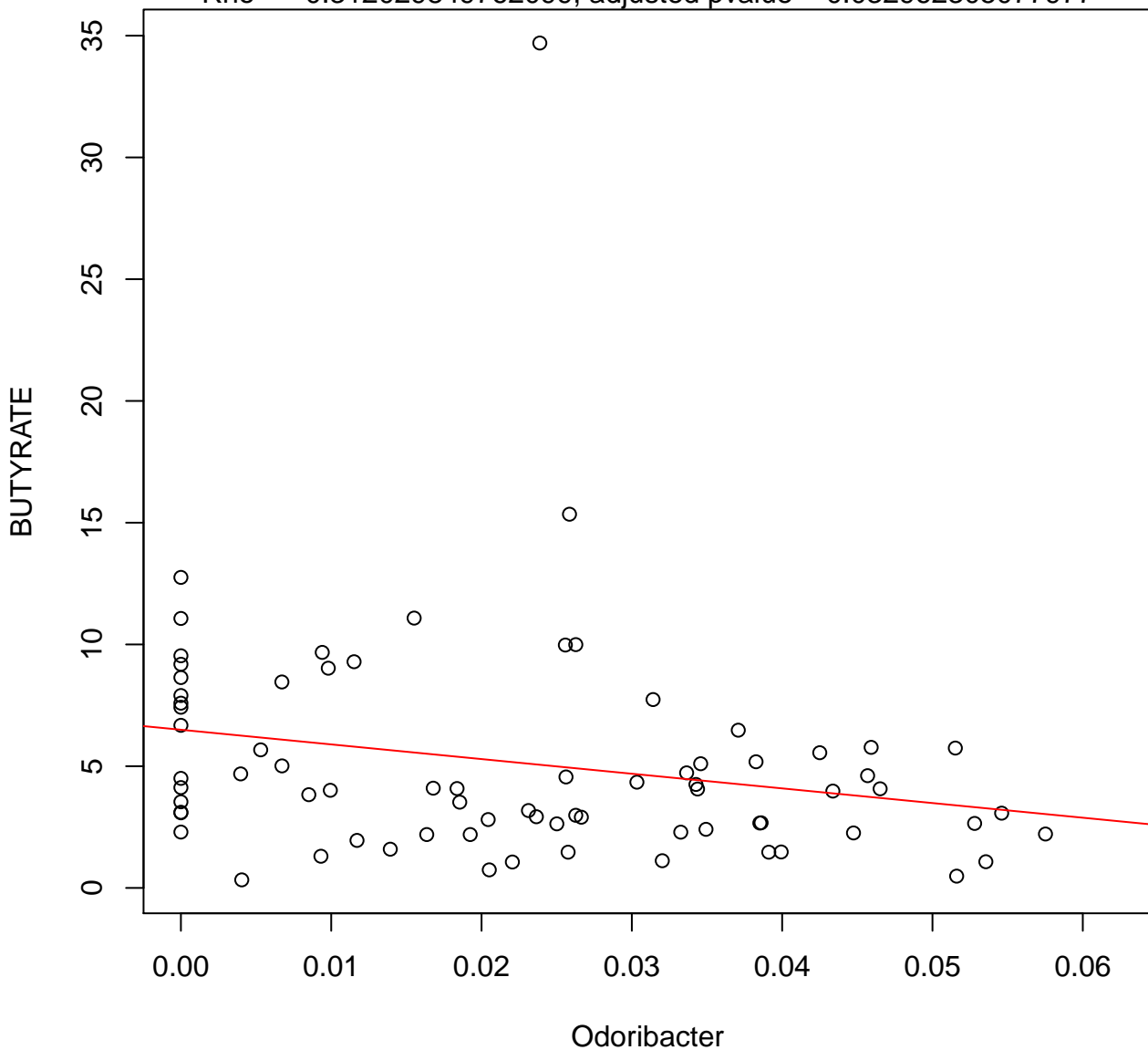
## Timepoint 2 , BUTYRATE ~ Bacteroides

Rho = 0.18458168266244, adjusted pvalue = 0.225782464408515



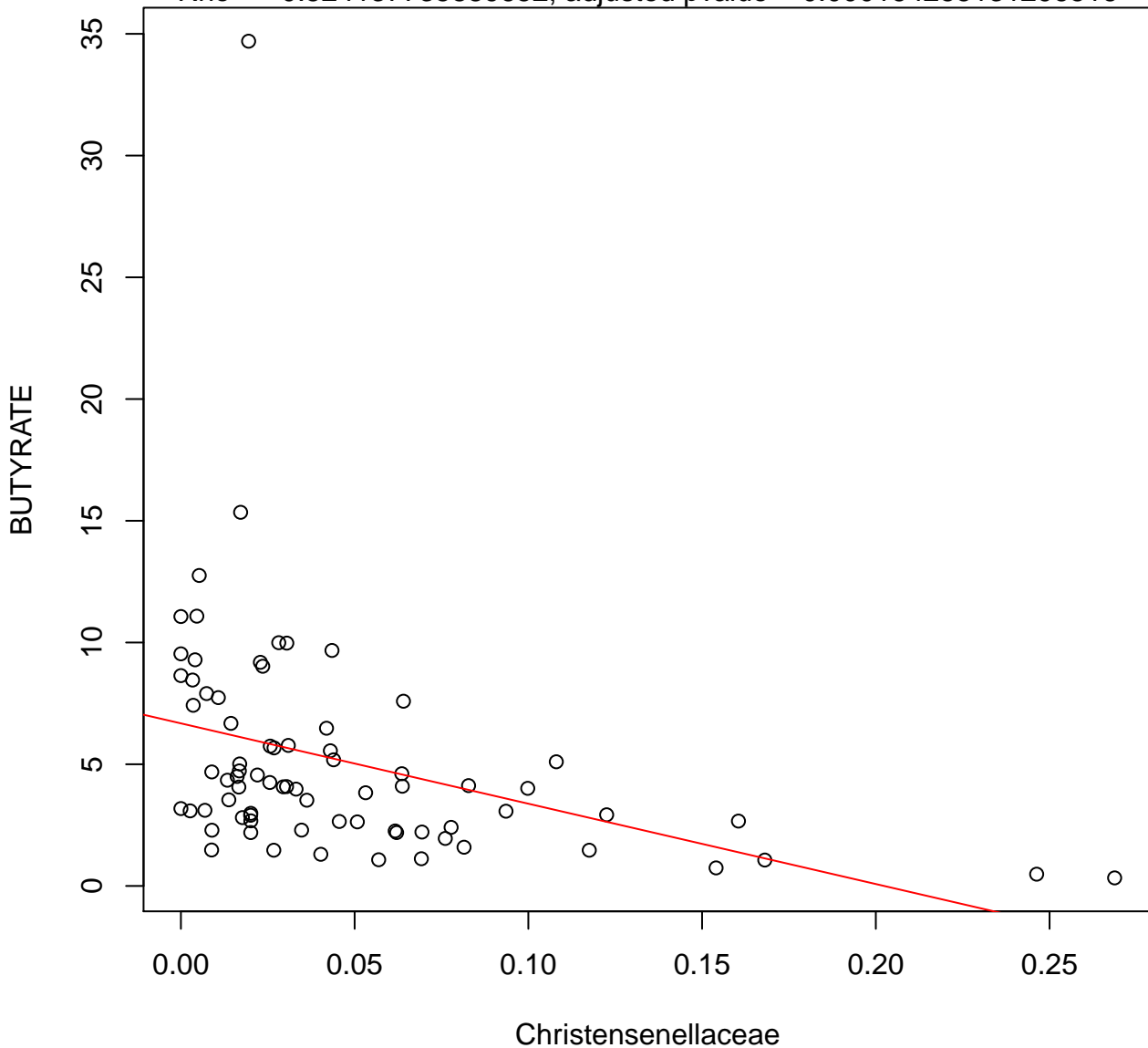
## Timepoint 2 , BUTYRATE ~ Odoribacter

Rho =  $-0.312029849762099$ , adjusted pvalue =  $0.032962305077977$



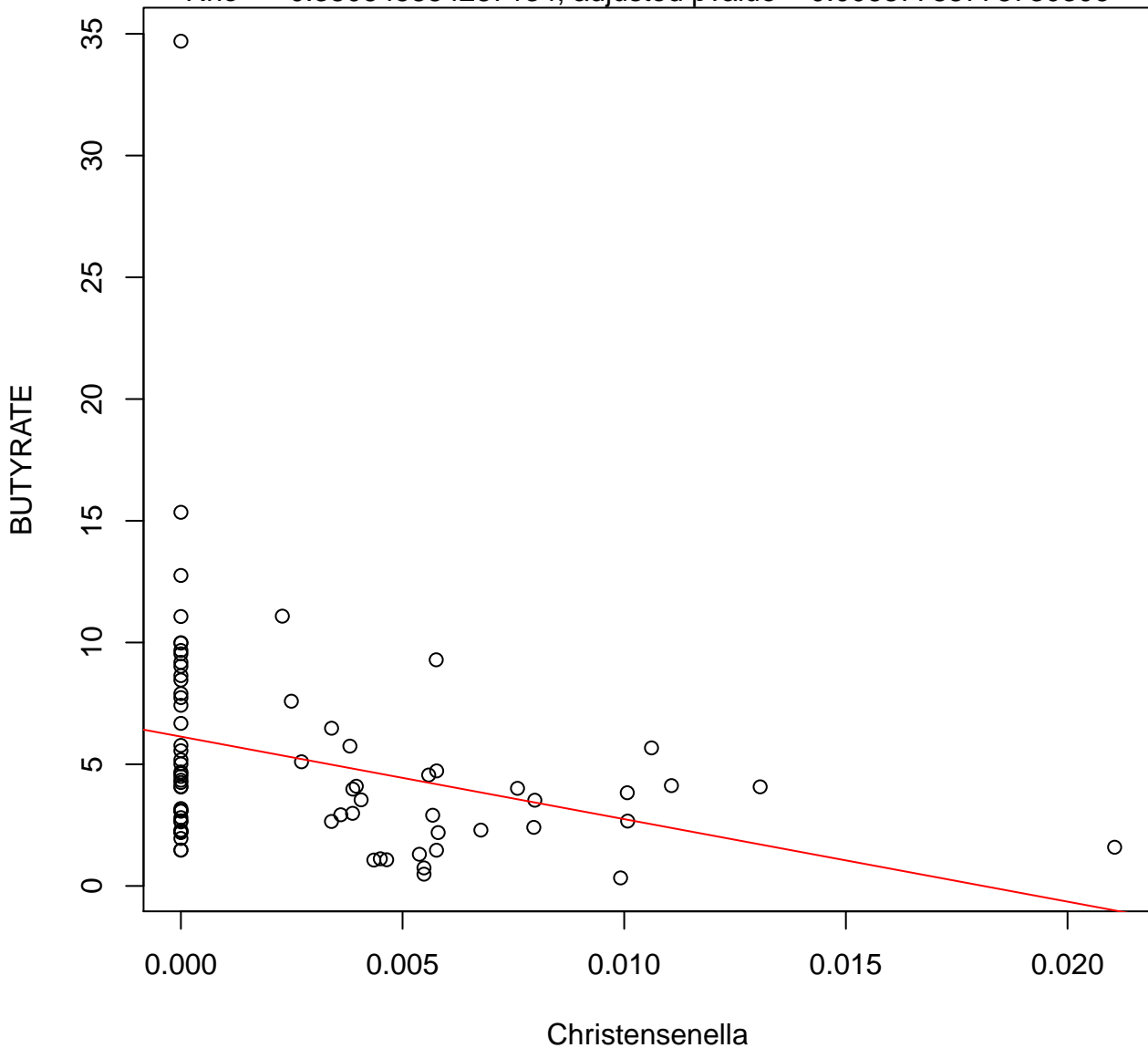
## Timepoint 2 , BUTYRATE ~ Christensenellaceae

Rho =  $-0.524137735889652$ , adjusted pvalue =  $0.000164255131296516$



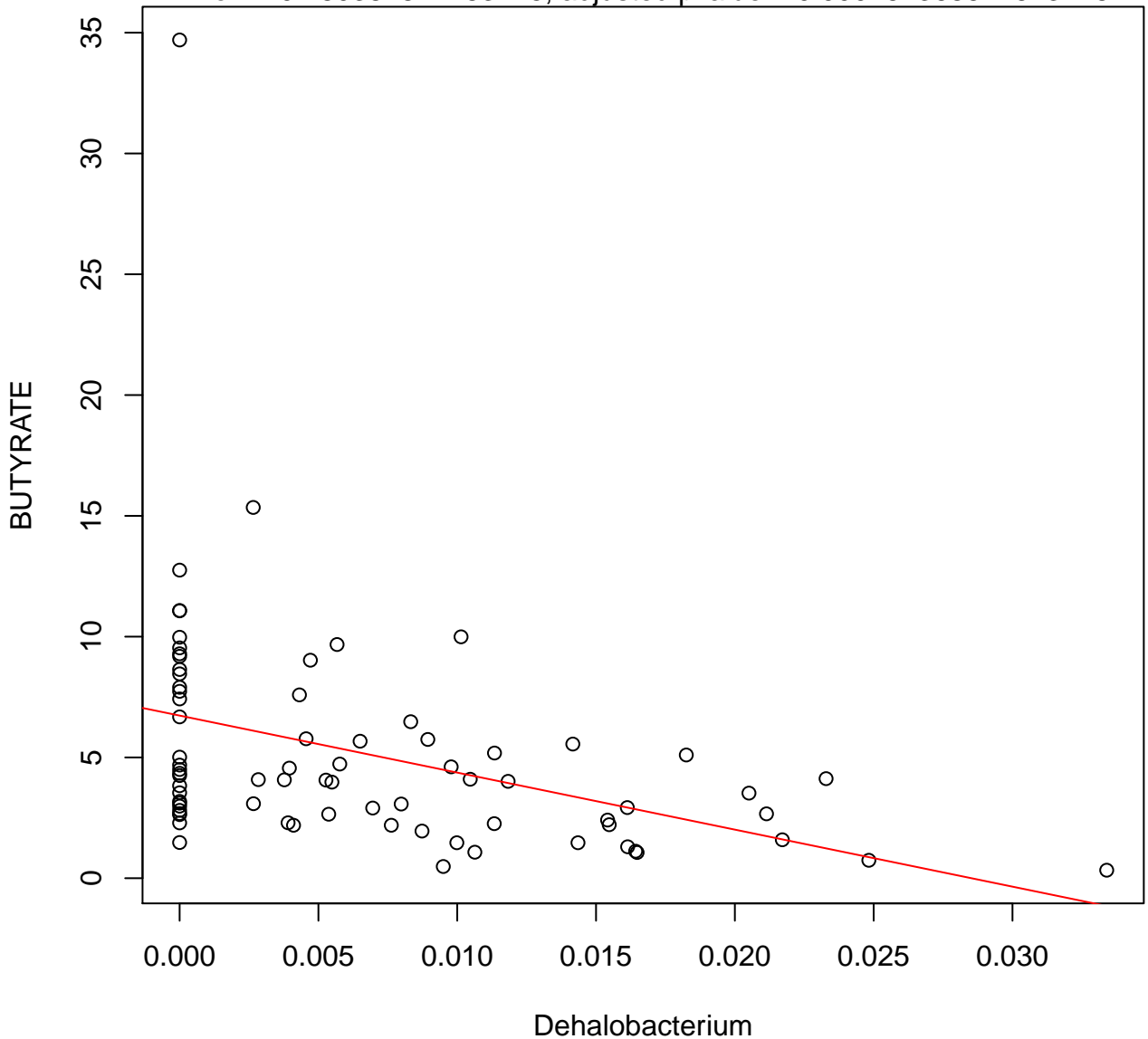
## Timepoint 2 , BUTYRATE ~ Christensenella

Rho =  $-0.380645854287134$ , adjusted pvalue =  $0.00687788778730306$



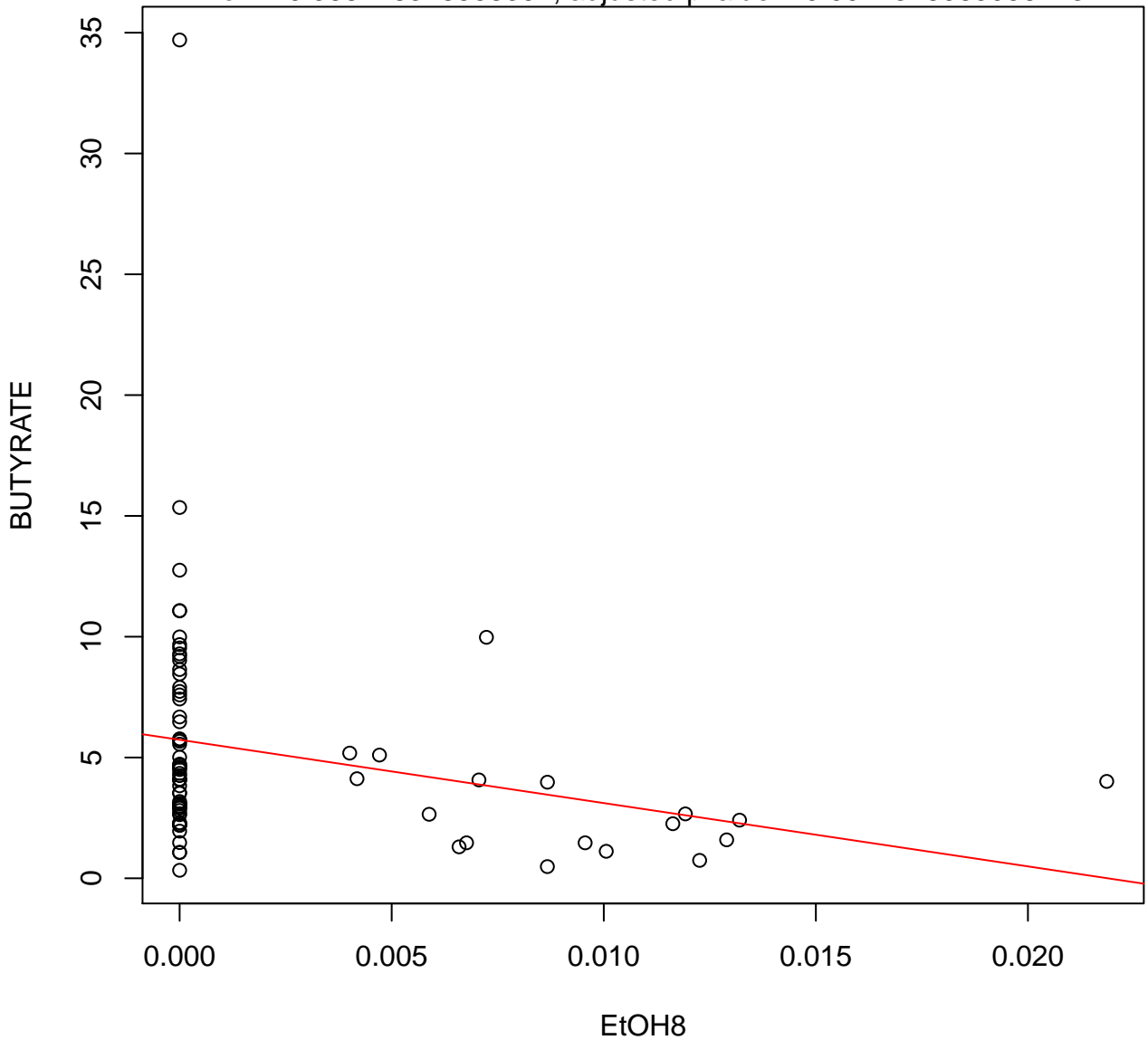
## Timepoint 2 , BUTYRATE ~ Dehalobacterium

Rho =  $-0.480382814483725$ , adjusted pvalue =  $0.000761368647643748$



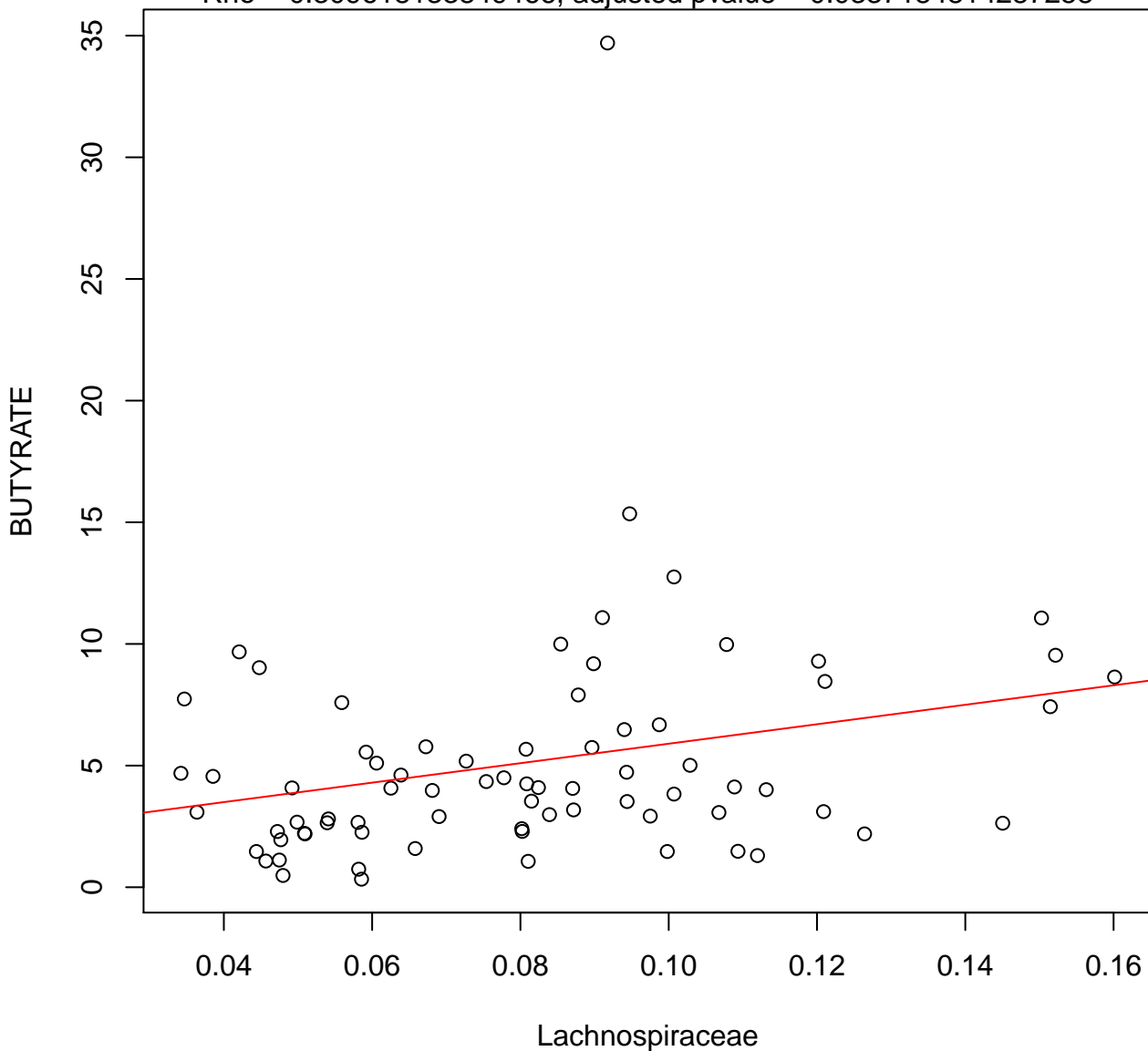
## Timepoint 2 , BUTYRATE ~ EtOH8

Rho =  $-0.368718318558392$ , adjusted pvalue =  $0.00743180630562437$



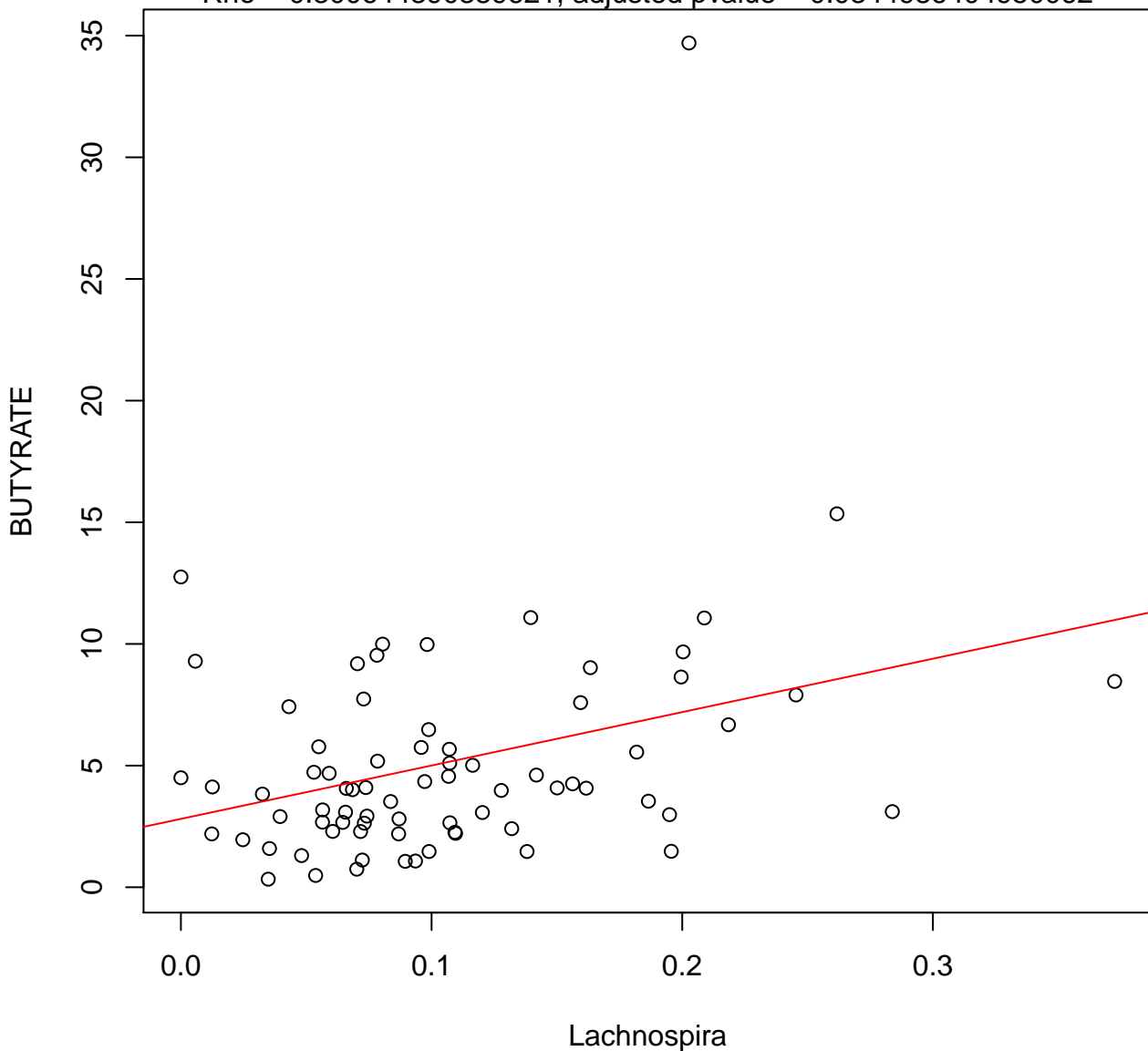
## Timepoint 2 , BUTYRATE ~ Lachnospiraceae

Rho = 0.309618133849466, adjusted pvalue = 0.0337184814287258



# Timepoint 2 , BUTYRATE ~ Lachnospira

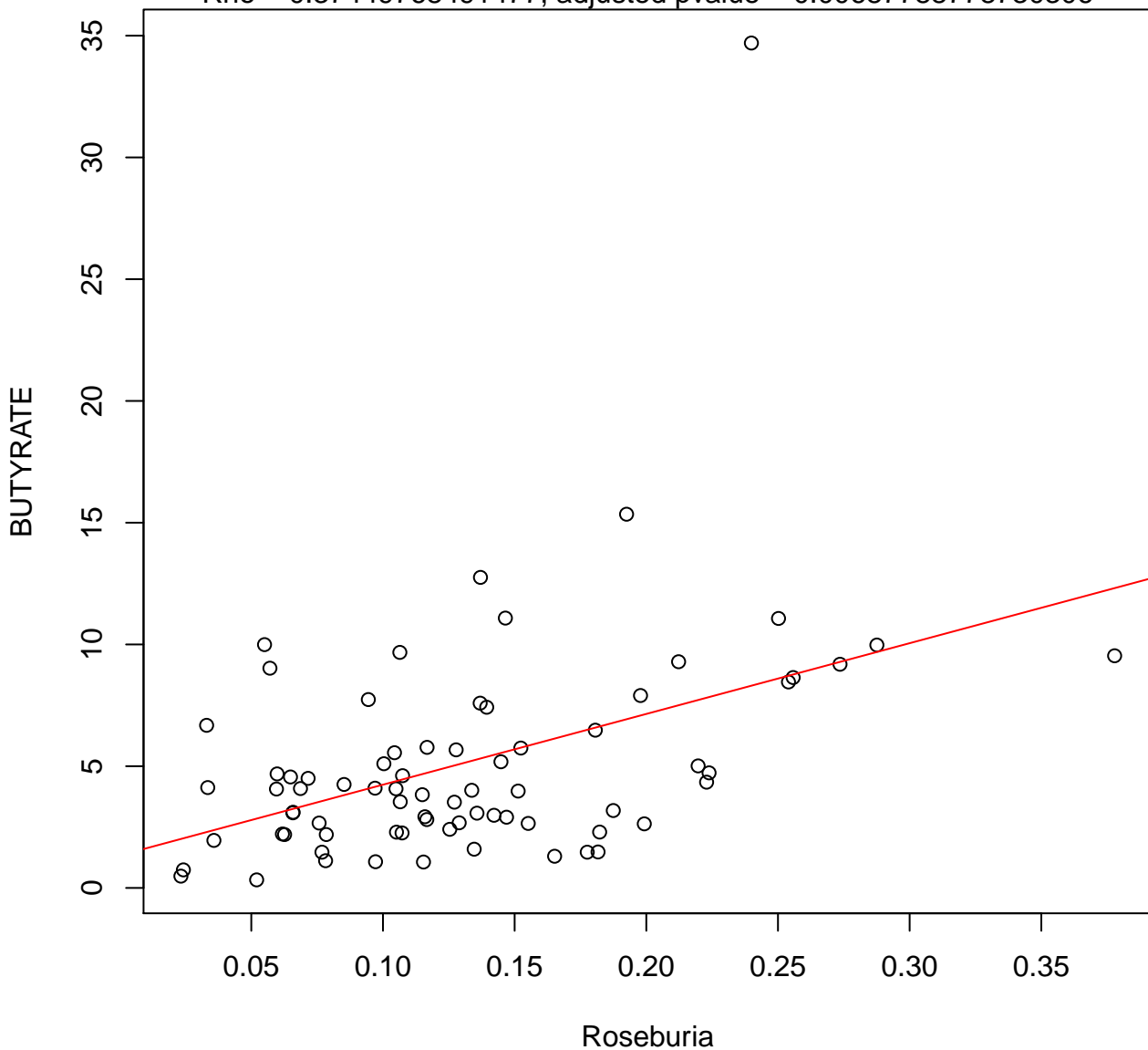
Rho = 0.300644390389621, adjusted pvalue = 0.0344986404950062





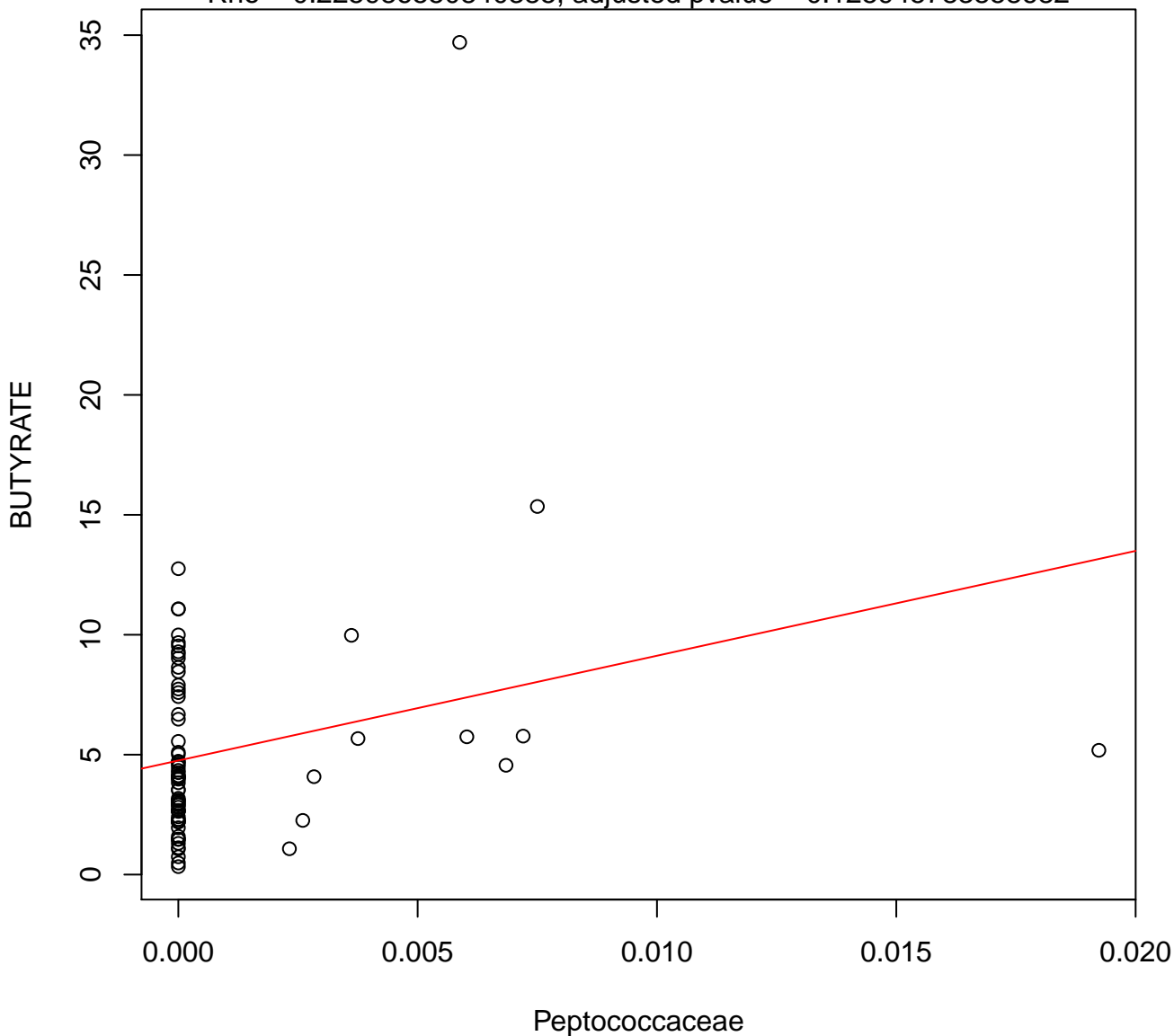
## Timepoint 2 , BUTYRATE ~ Roseburia

Rho = 0.37449768491477, adjusted pvalue = 0.00687788778730306



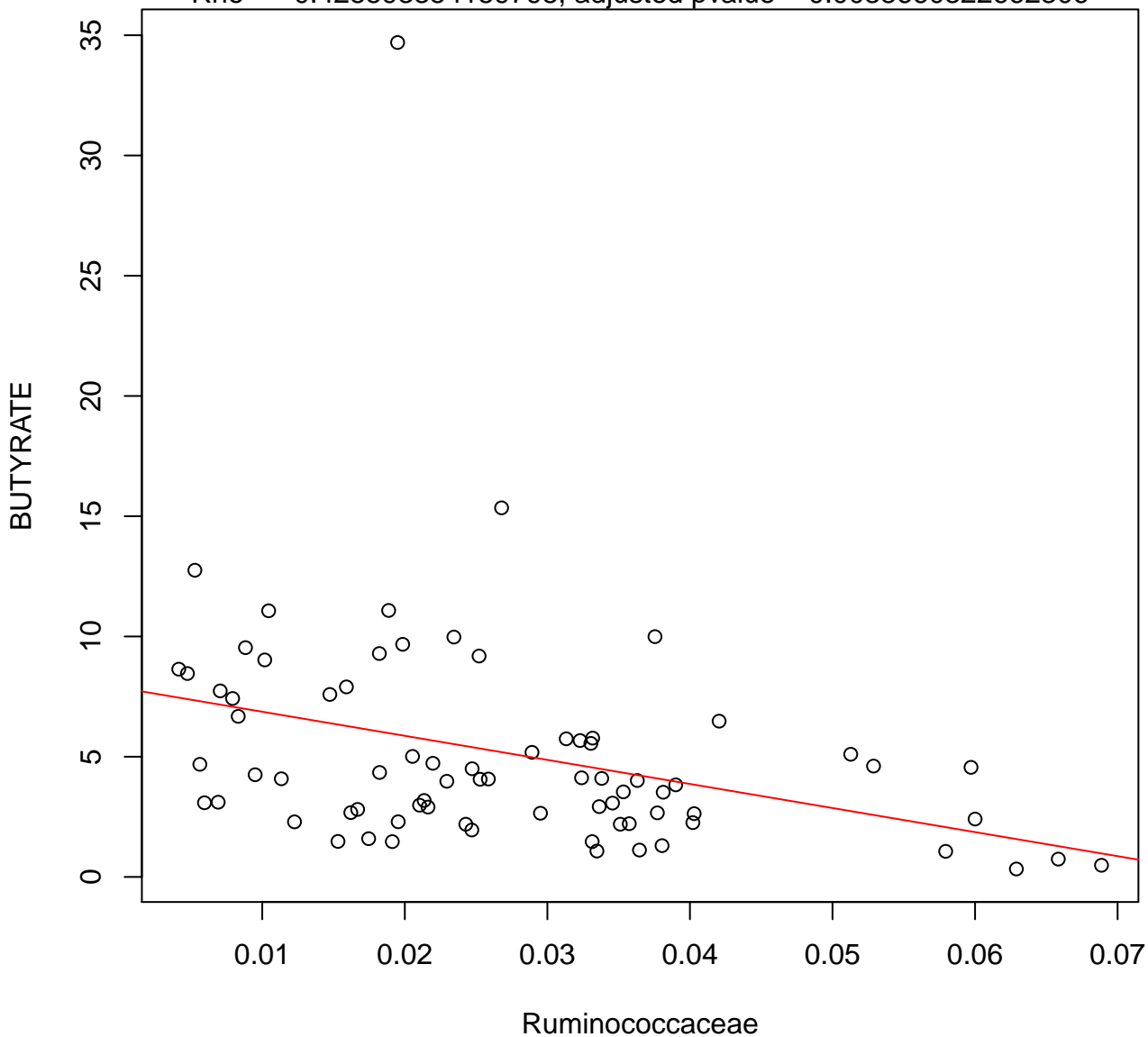
# Timepoint 2 , BUTYRATE ~ Peptococcaceae

Rho = 0.225986550840385, adjusted pvalue = 0.125945783858682



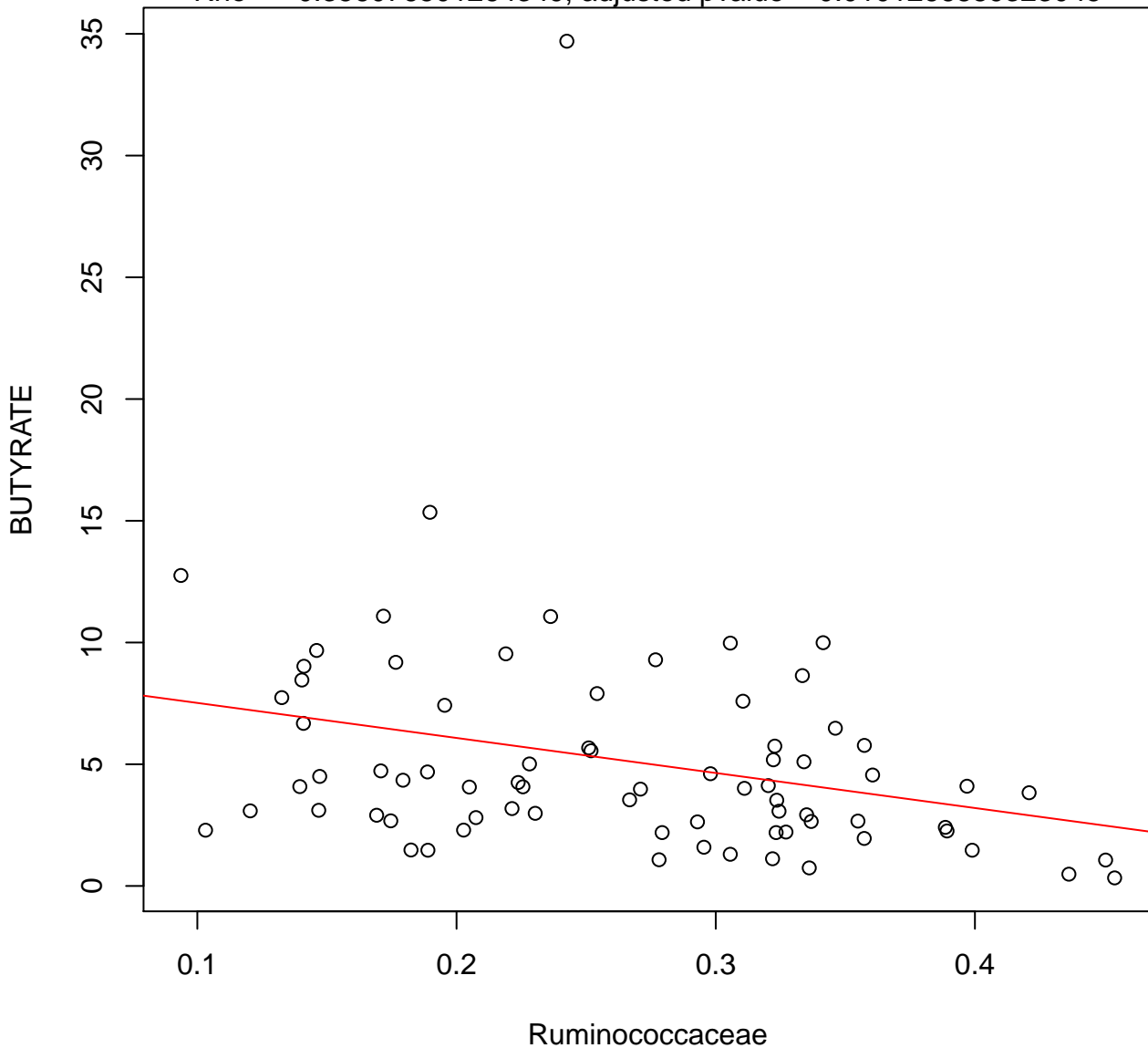
# Timepoint 2 , BUTYRATE ~ Ruminococcaceae

Rho =  $-0.425593354159798$ , adjusted pvalue =  $0.0038660322662306$



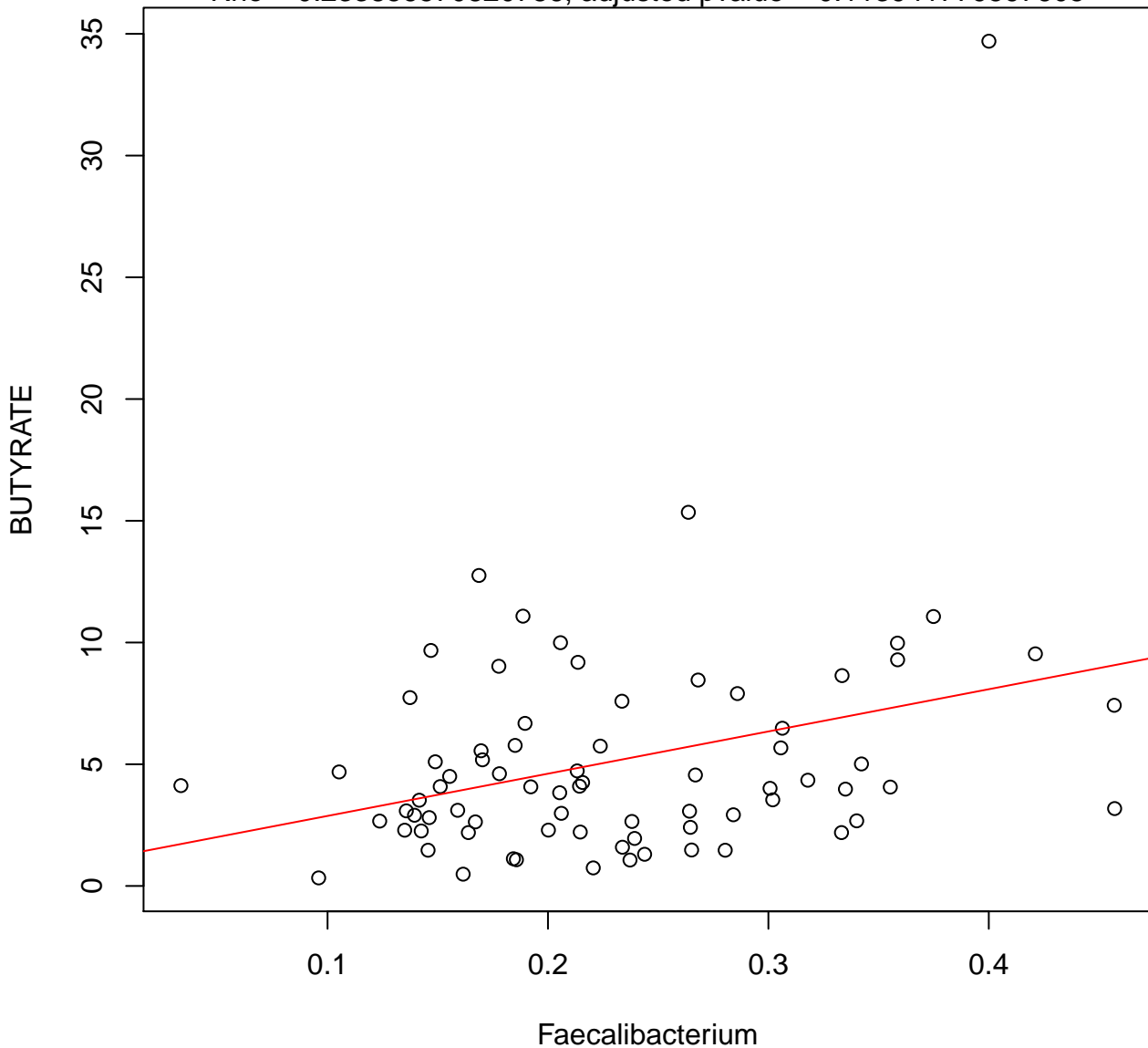
## Timepoint 2 , BUTYRATE ~ Ruminococcaceae

Rho =  $-0.356076501264349$ , adjusted pvalue =  $0.0101266889323045$



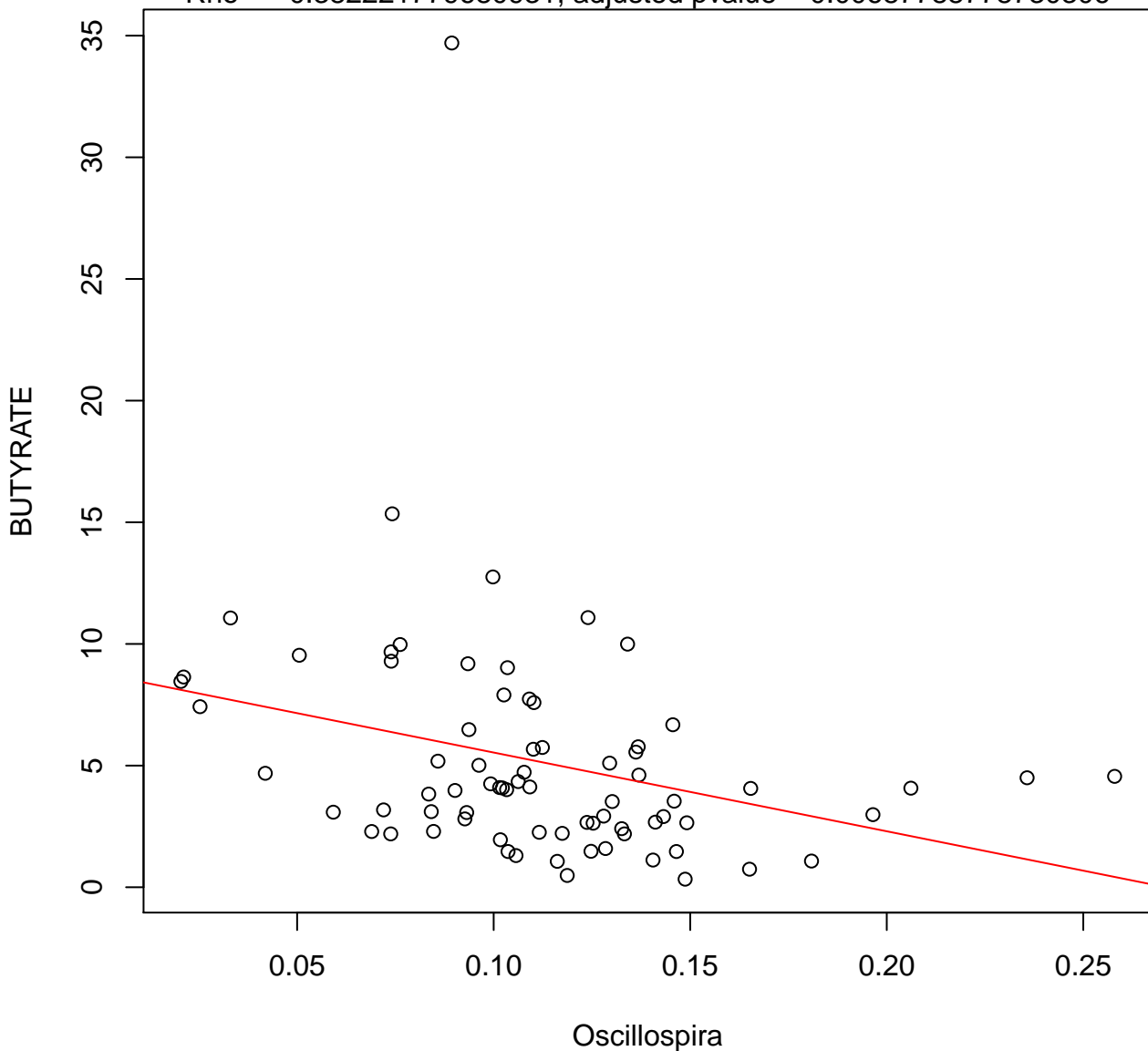
## Timepoint 2 , BUTYRATE ~ Faecalibacterium

Rho = 0.233856570820786, adjusted pvalue = 0.113941779597605



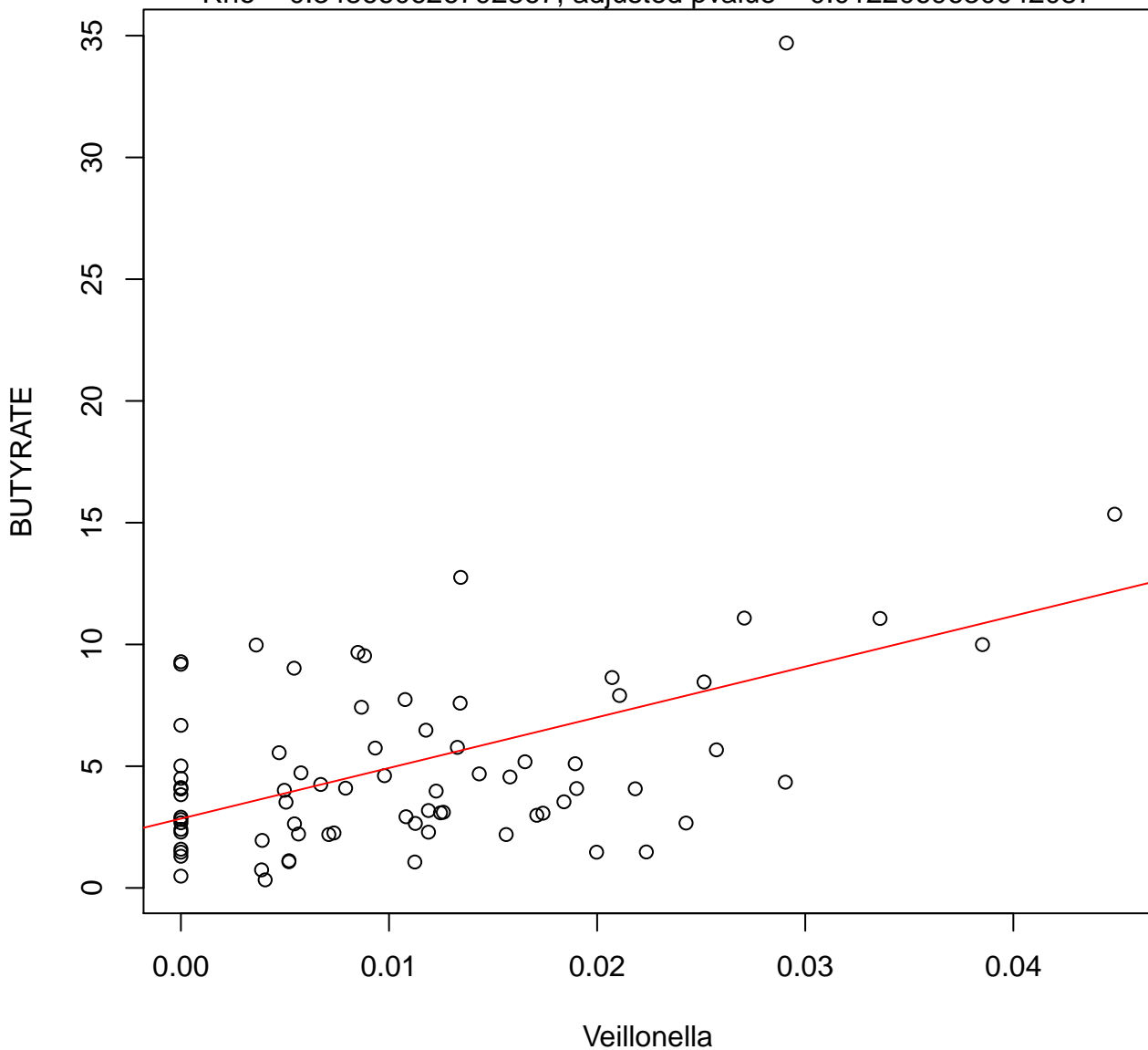
## Timepoint 2 , BUTYRATE ~ Oscillospira

Rho =  $-0.382221779680931$ , adjusted pvalue =  $0.00687788778730306$



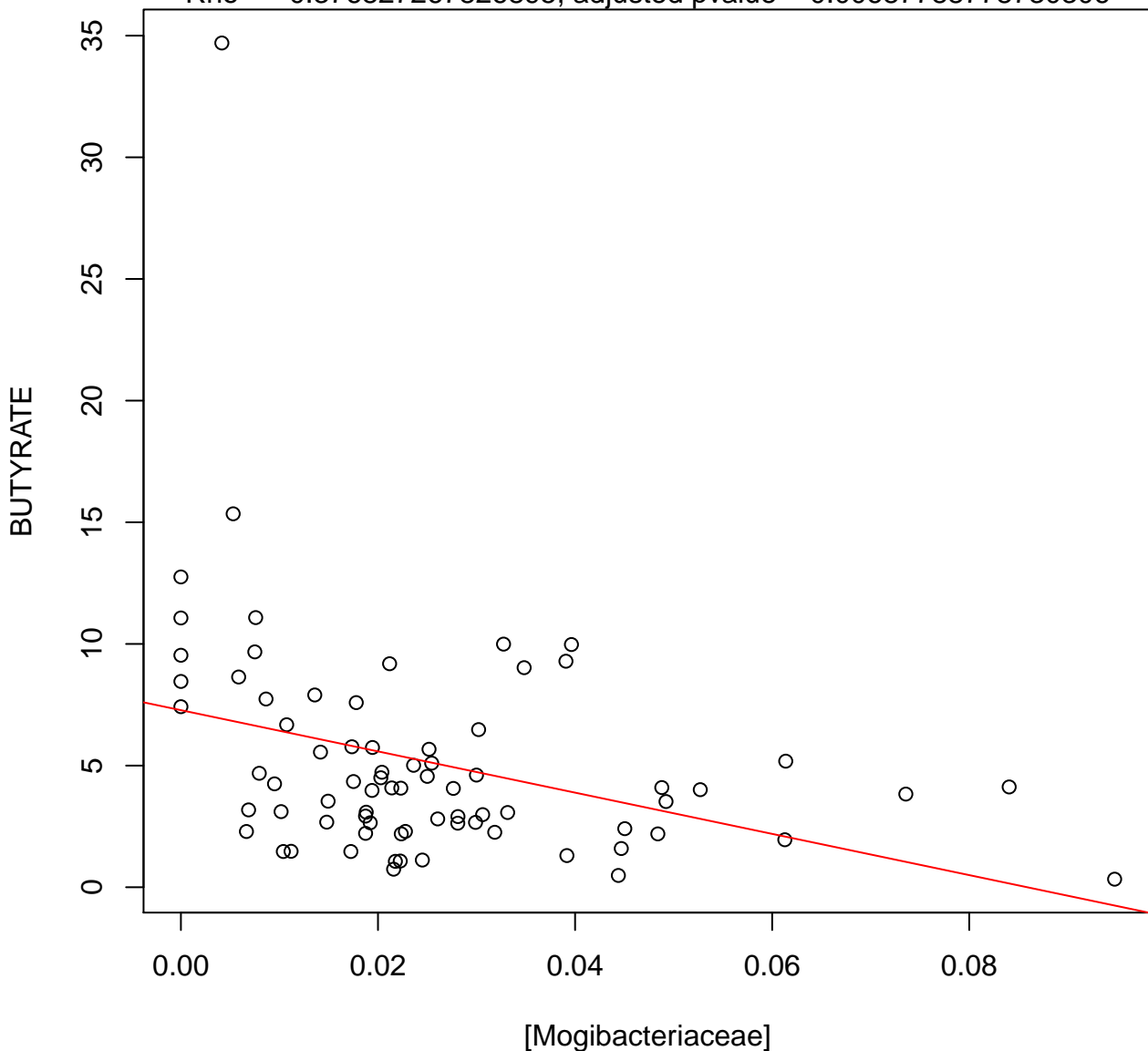
## Timepoint 2 , BUTYRATE ~ Veillonella

Rho = 0.348660626792867, adjusted pvalue = 0.0122069630042087



# Timepoint 2 , BUTYRATE ~ [Mogibacteriaceae]

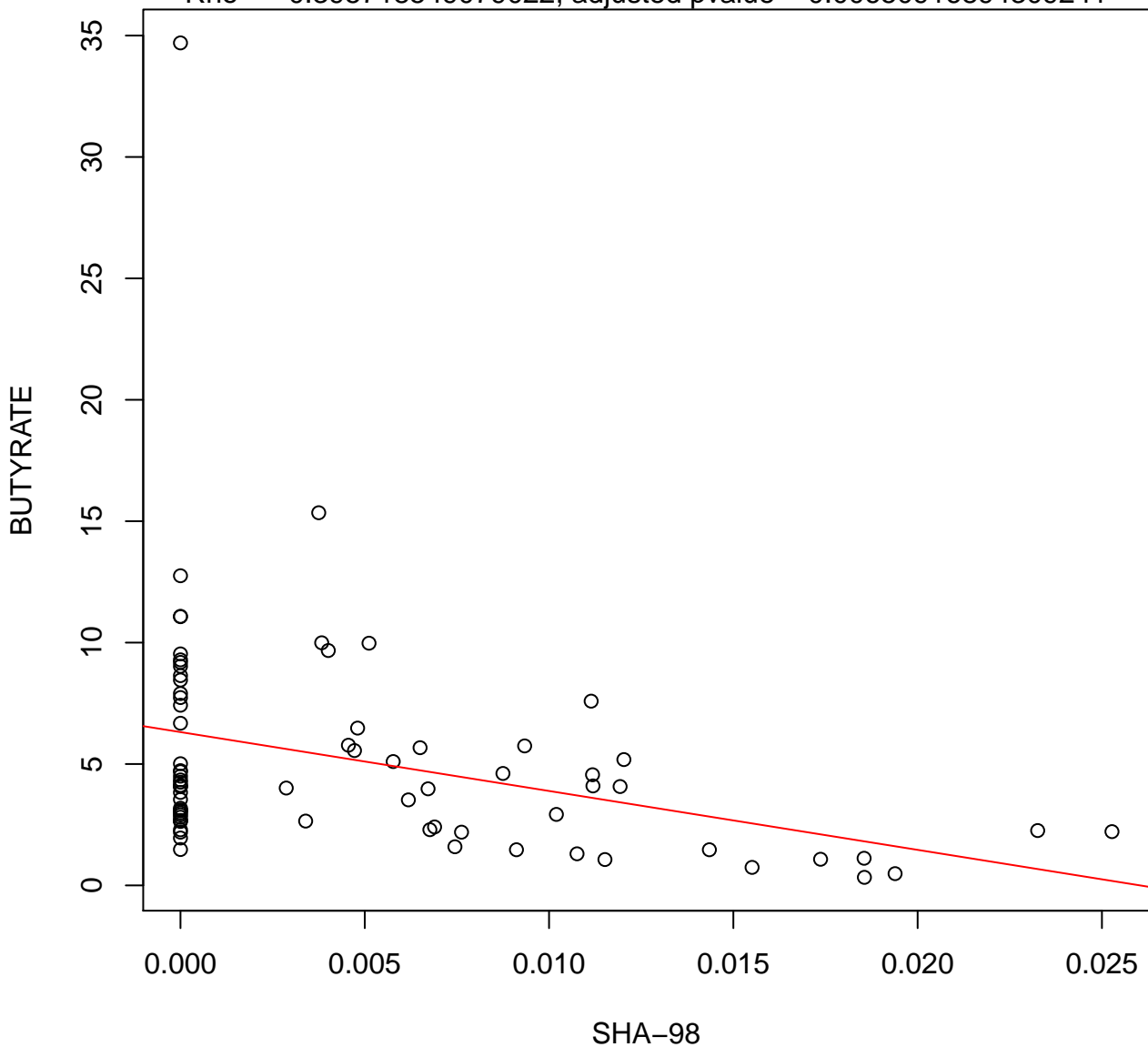
Rho =  $-0.376827267826895$ , adjusted pvalue =  $0.00687788778730306$





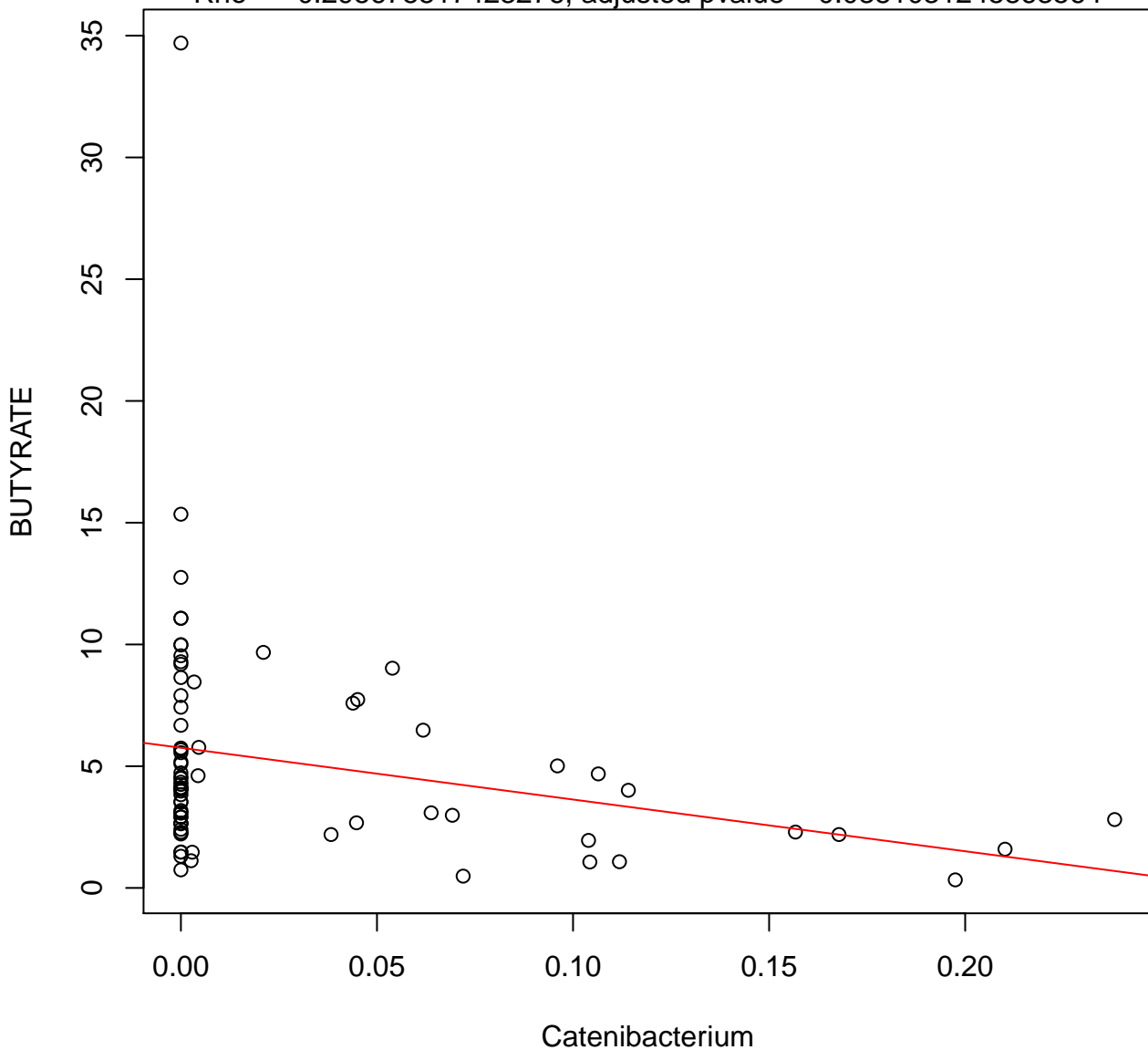
## Timepoint 2 , BUTYRATE ~ SHA-98

Rho =  $-0.395718549079022$ , adjusted pvalue =  $0.00650916894309241$



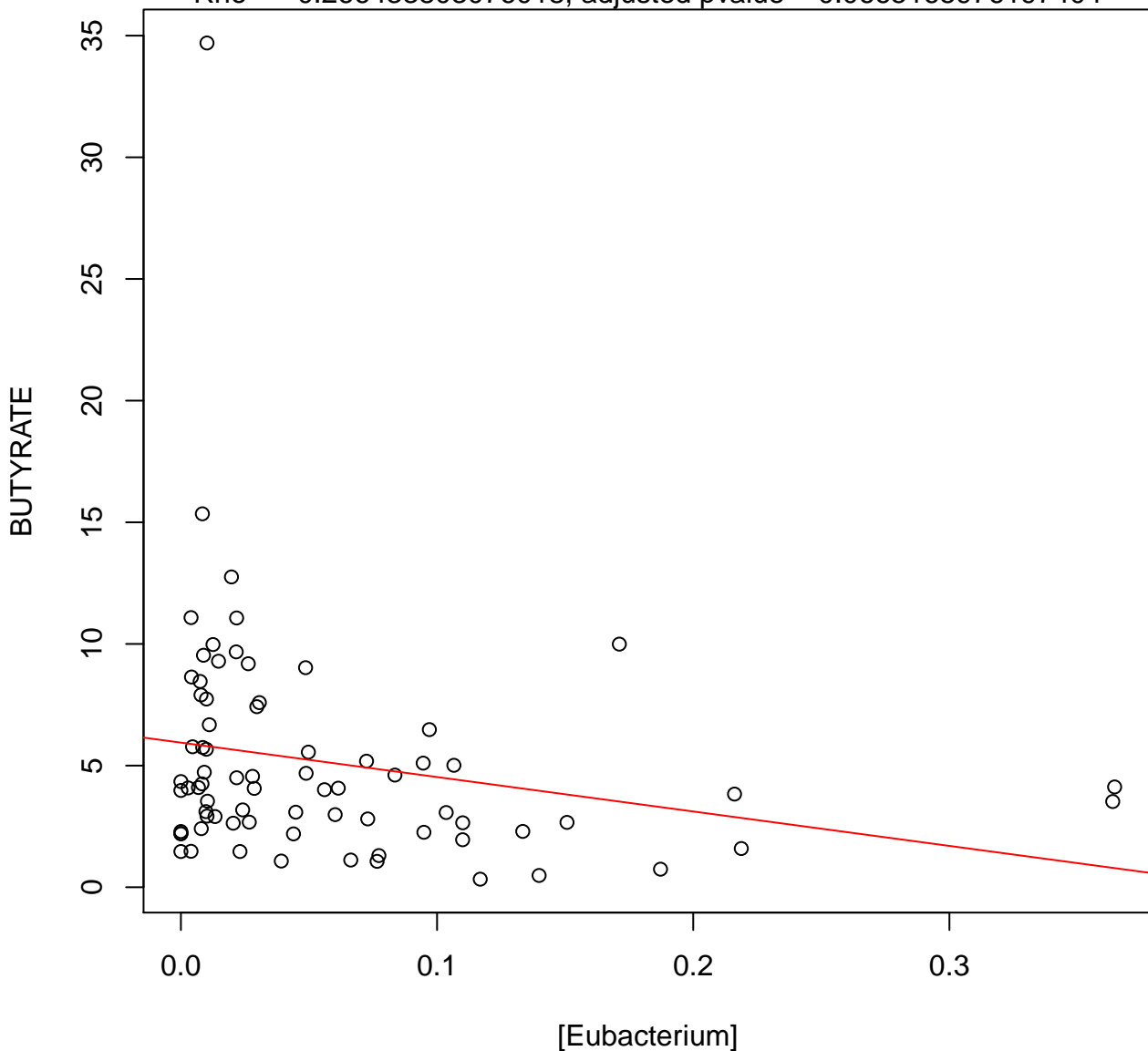
# Timepoint 2 , BUTYRATE ~ Catenibacterium

Rho =  $-0.295675517423276$ , adjusted pvalue =  $0.0381031245863564$



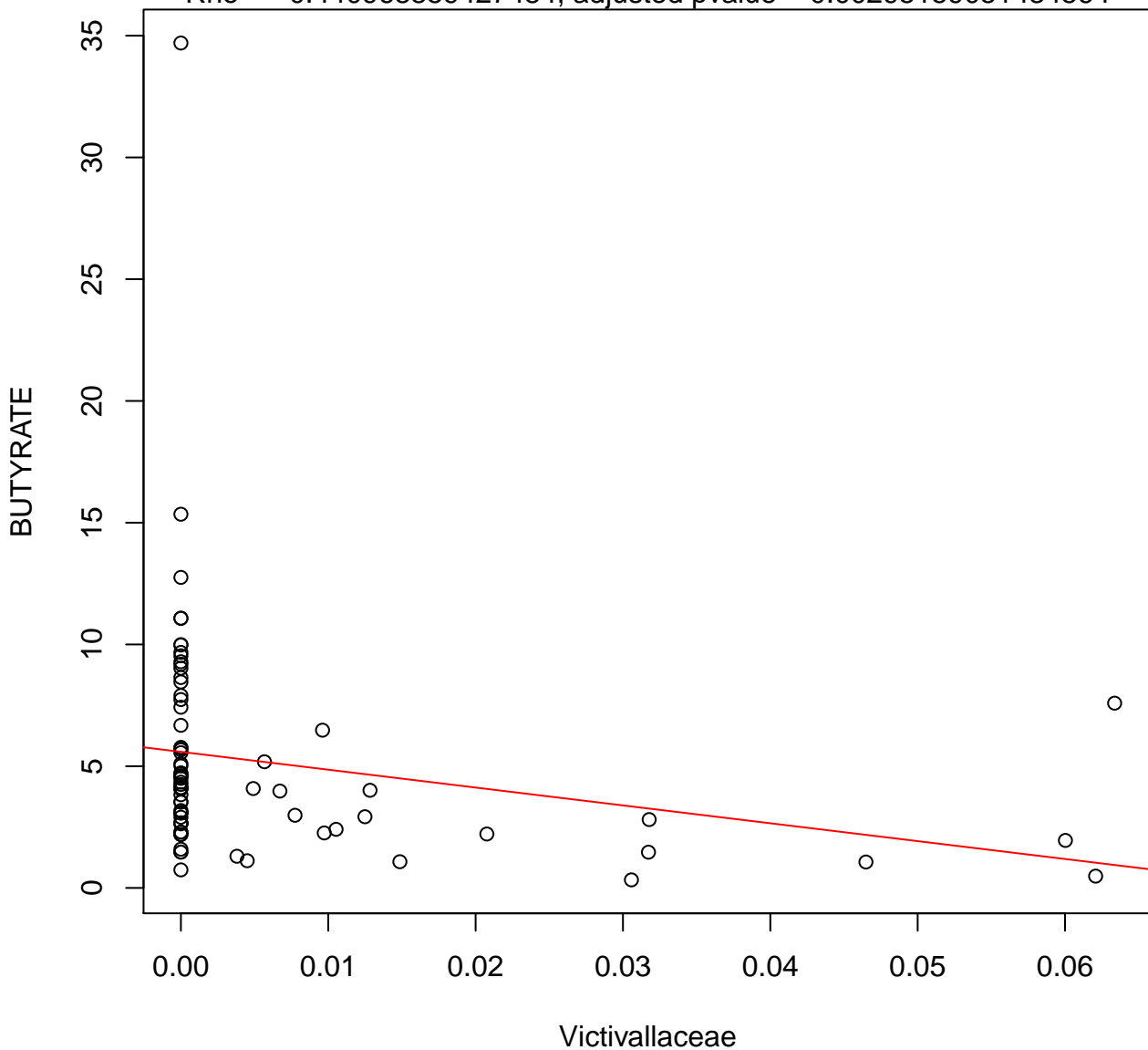
## Timepoint 2 , BUTYRATE ~ [Eubacterium]

Rho =  $-0.266433803076018$ , adjusted pvalue =  $0.0665165976197404$



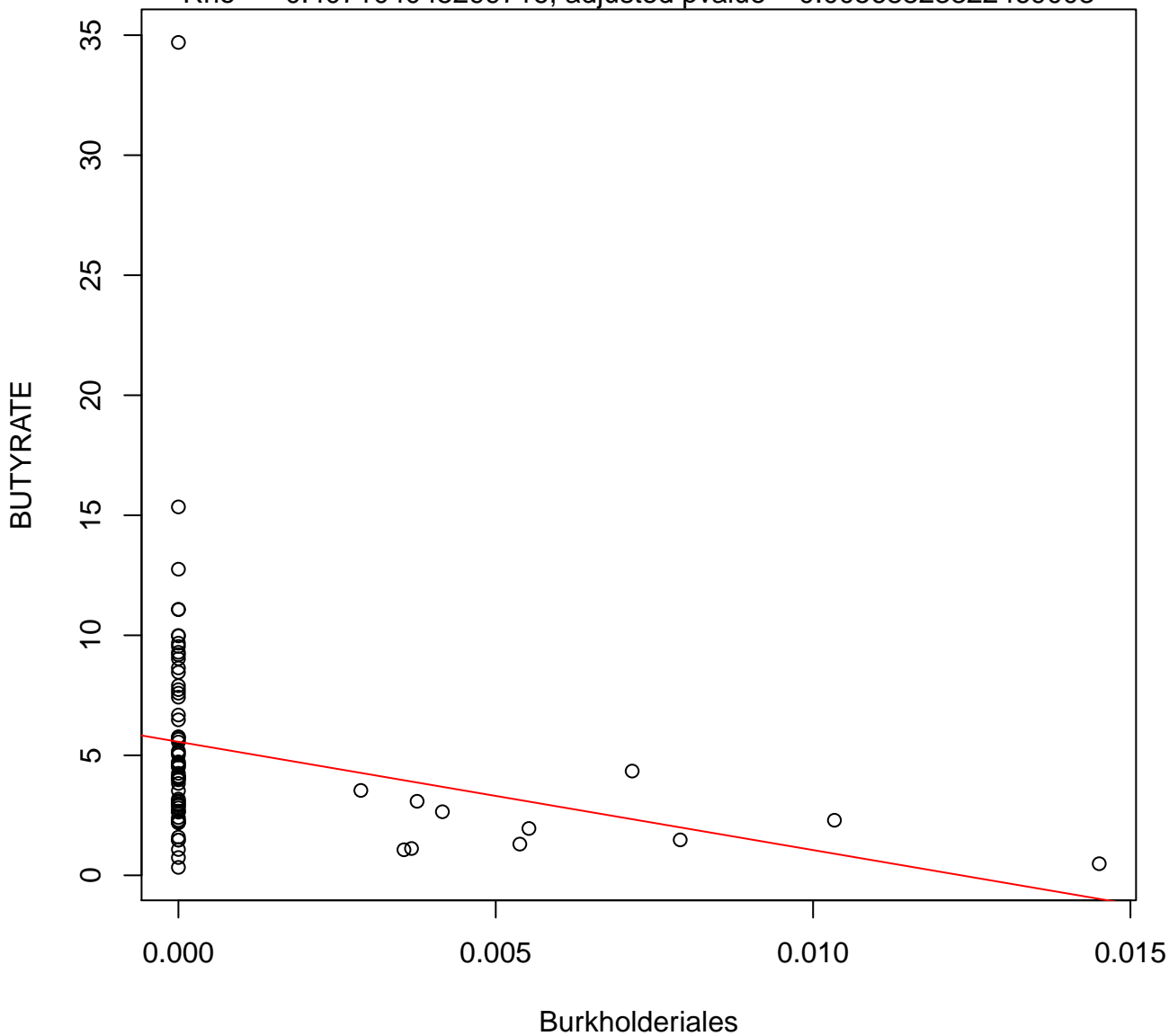
# Timepoint 2 , BUTYRATE ~ Victivallaceae

Rho =  $-0.440968859427484$ , adjusted pvalue =  $0.00295159051434564$



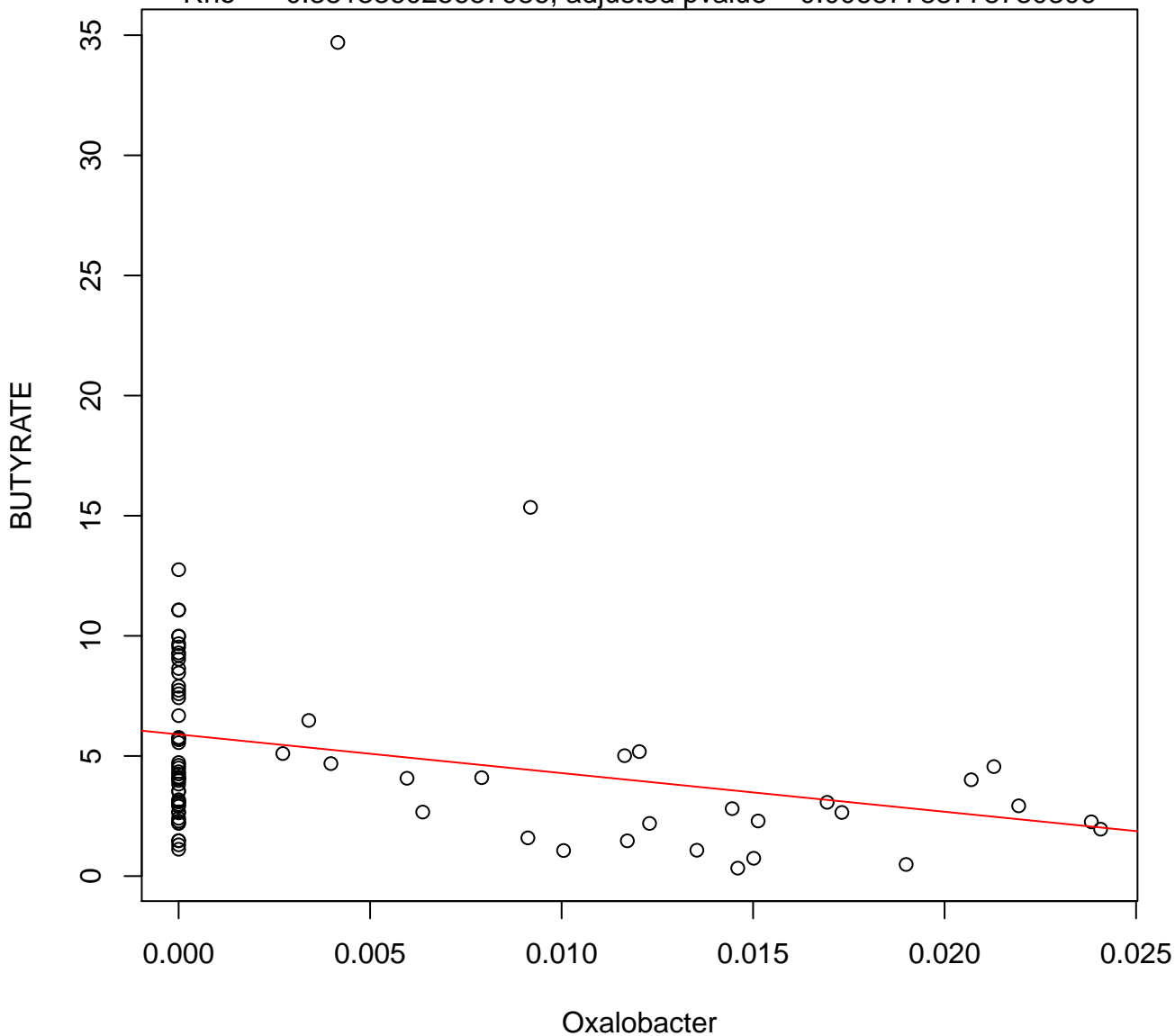
## Timepoint 2 , BUTYRATE ~ Burkholderiales

Rho =  $-0.407104045299716$ , adjusted pvalue =  $0.00568823322469003$



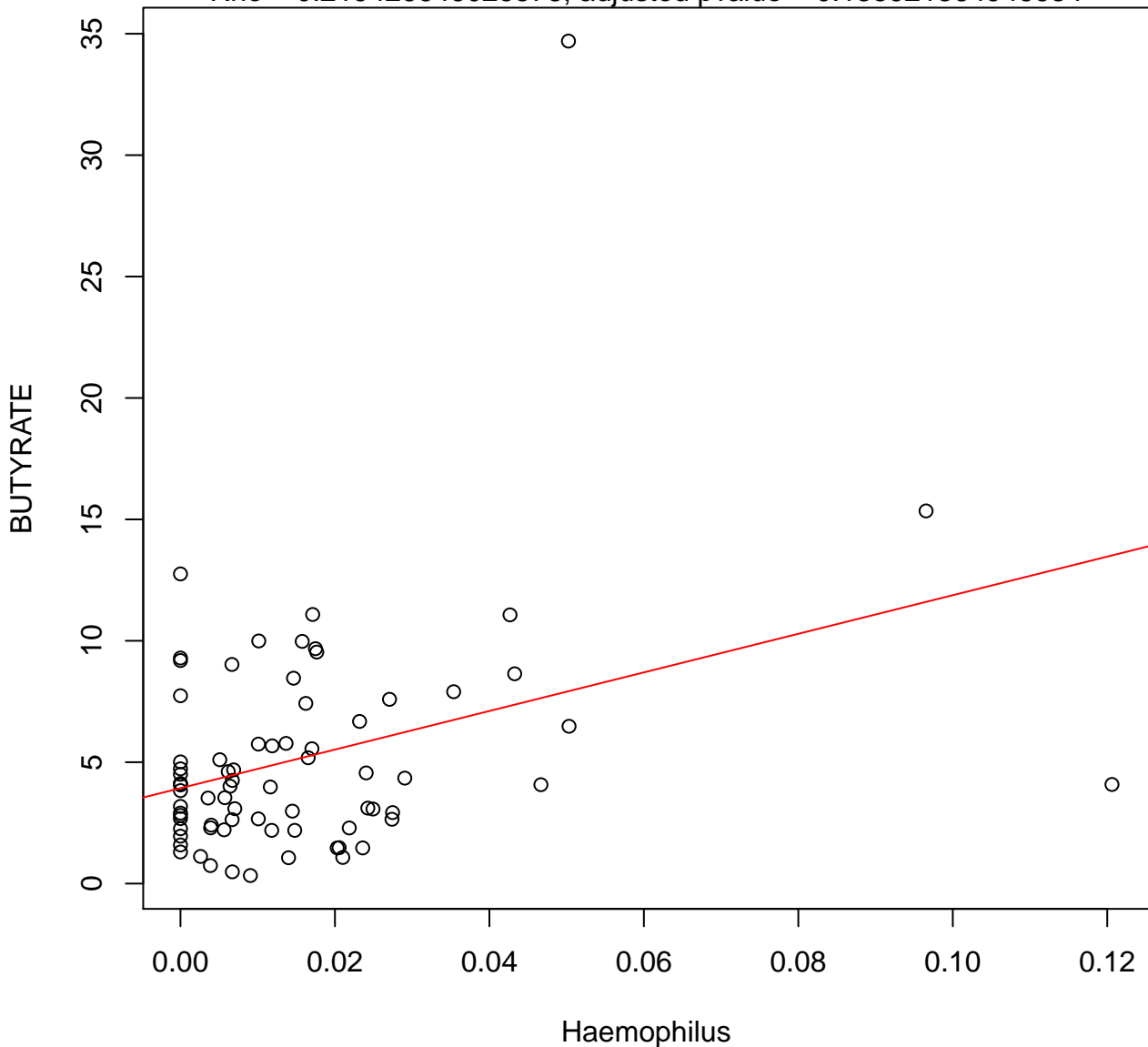
# Timepoint 2 , BUTYRATE ~ Oxalobacter

Rho =  $-0.381336025657986$ , adjusted pvalue =  $0.00687788778730306$



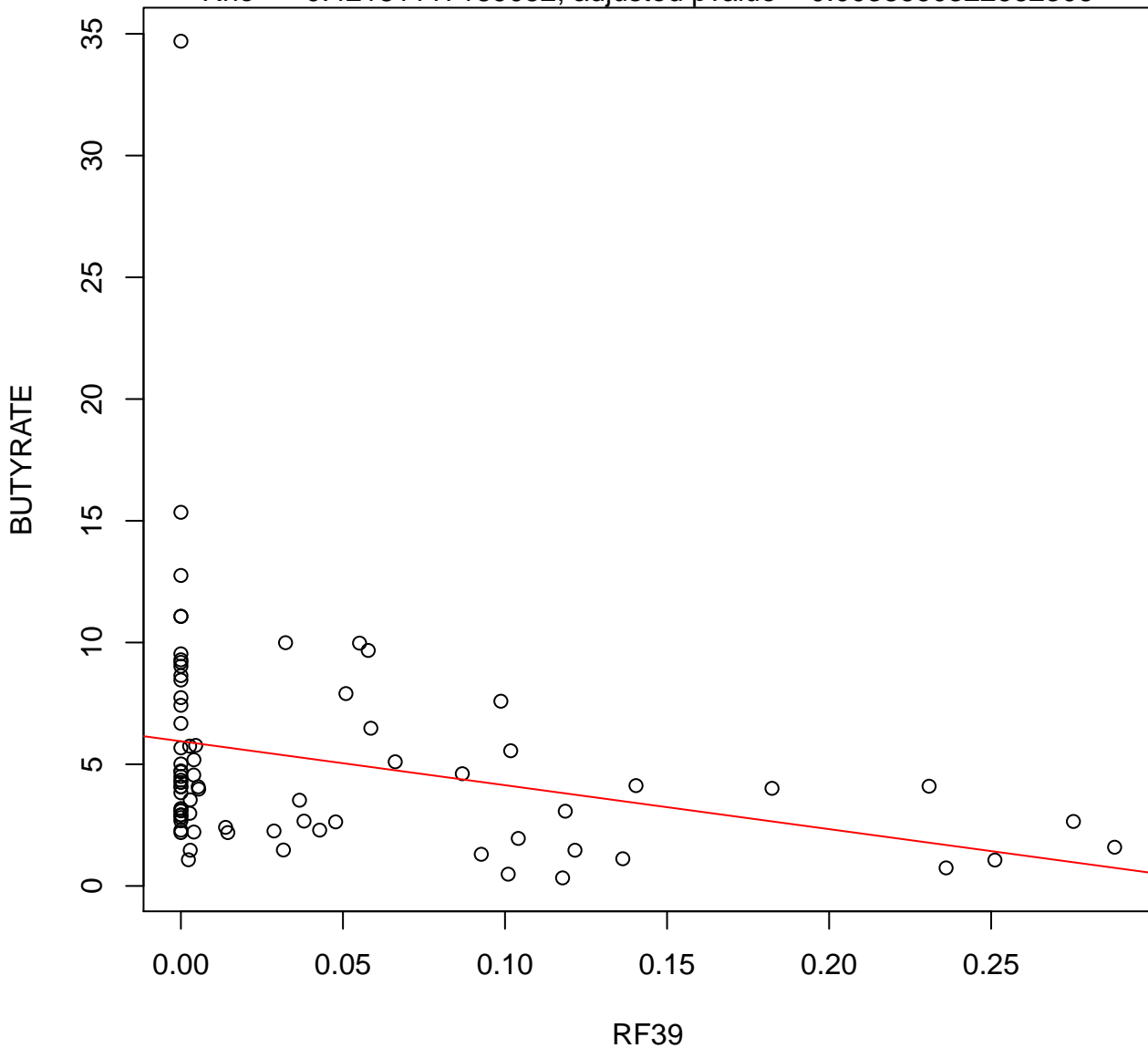
## Timepoint 2 , BUTYRATE ~ Haemophilus

Rho = 0.219426646025578, adjusted pvalue = 0.135921364946634



## Timepoint 2 , BUTYRATE ~ RF39

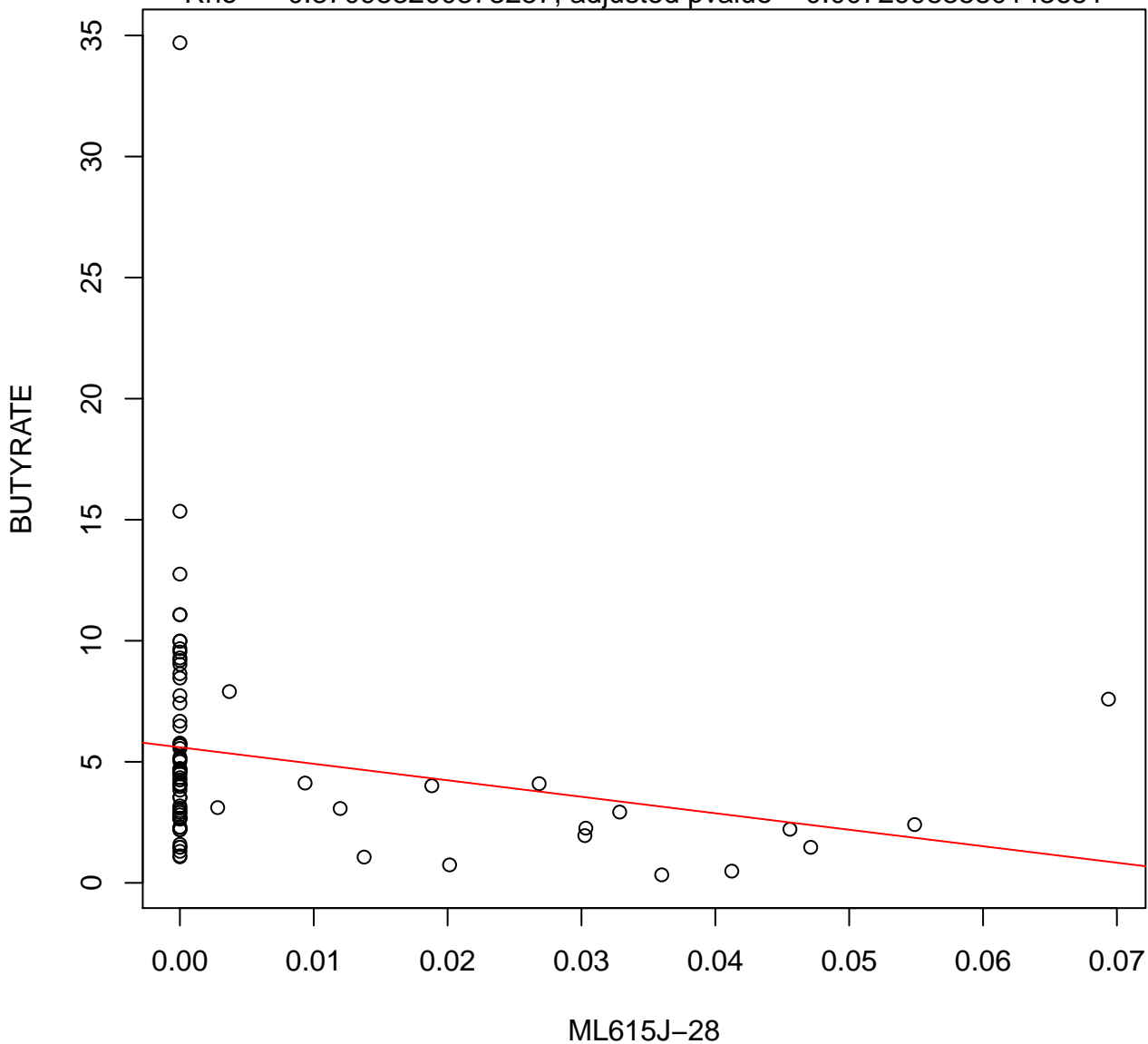
Rho = -0.42181117189052, adjusted pvalue = 0.0038660322662306





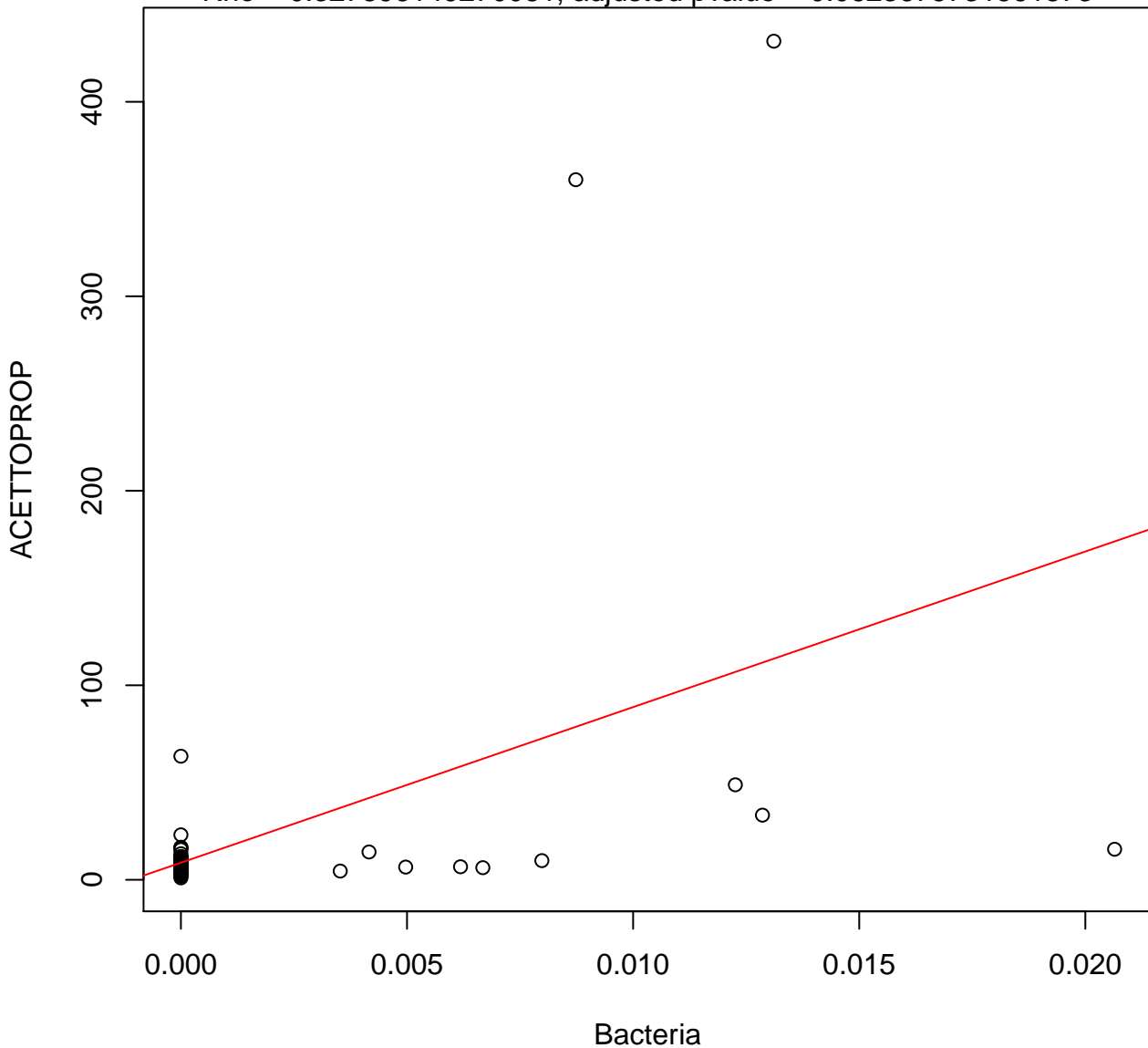
## Timepoint 2 , BUTYRATE ~ ML615J-28

Rho =  $-0.370953200373257$ , adjusted pvalue =  $0.00729983580143651$



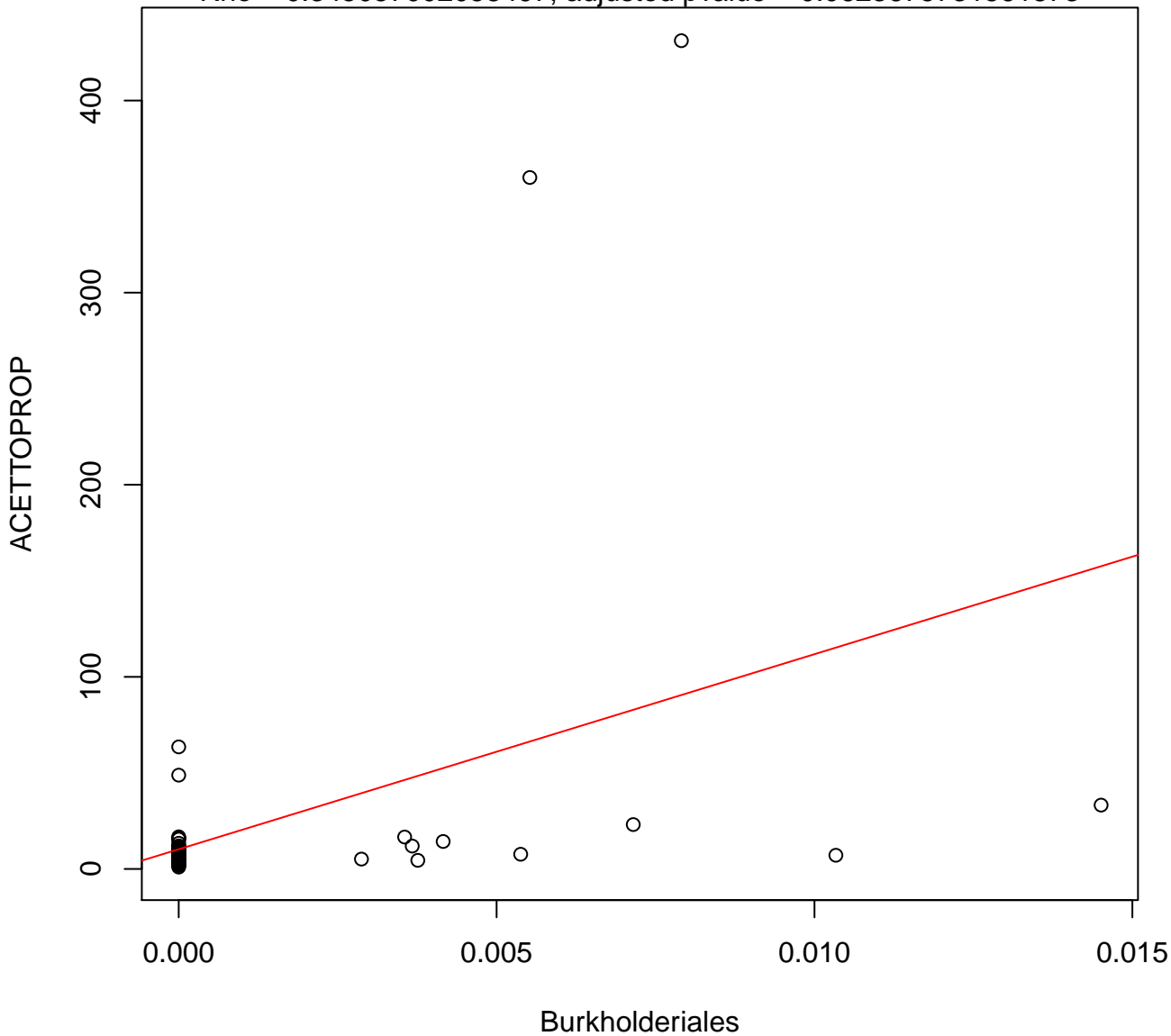
## Timepoint 2 , ACETTOPROP ~ Bacteria

Rho = 0.327396149270081, adjusted pvalue = 0.0623675731561873



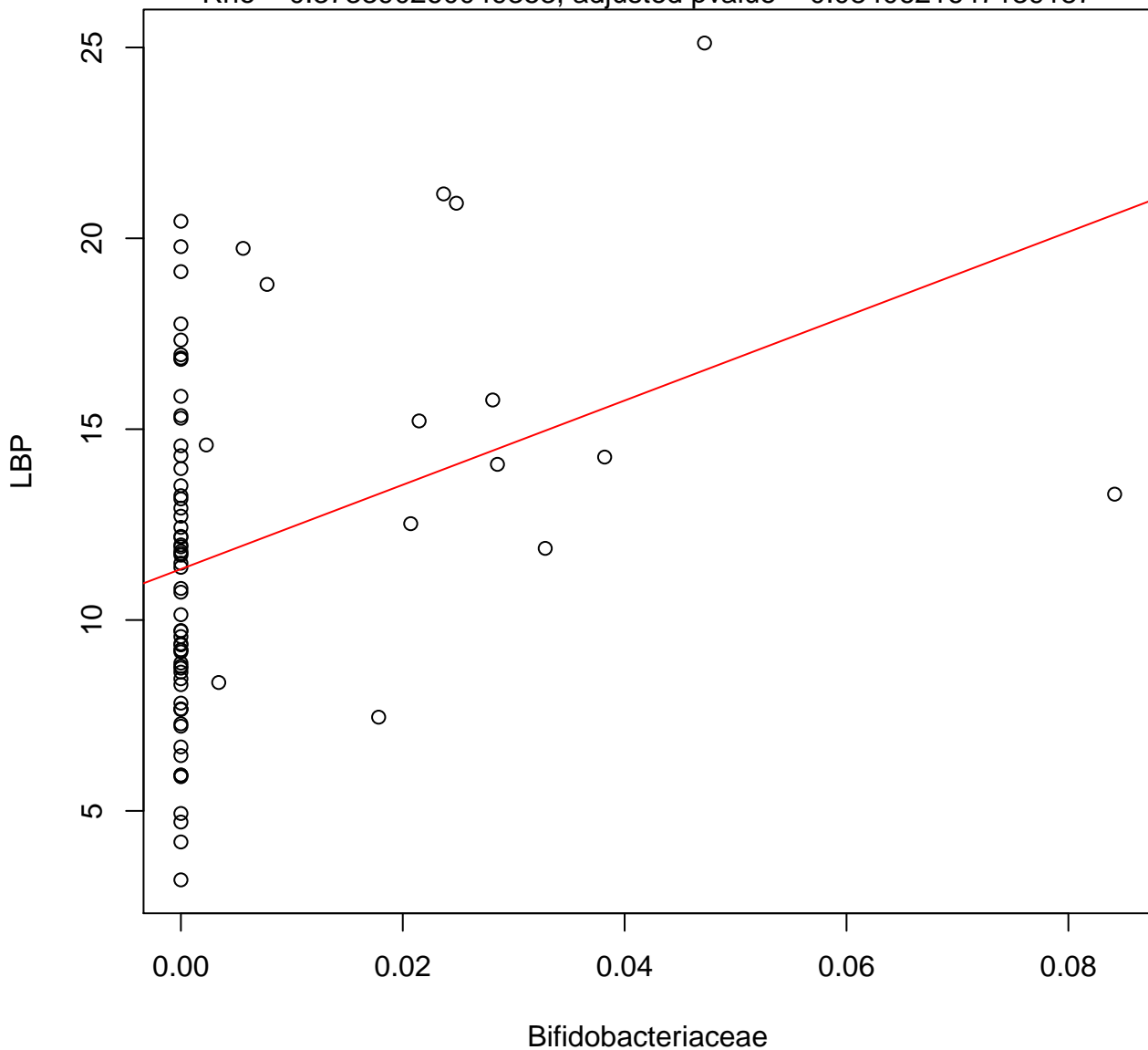
## Timepoint 2 , ACETTOPROP ~ Burkholderiales

Rho = 0.345057002058497, adjusted pvalue = 0.0623675731561873



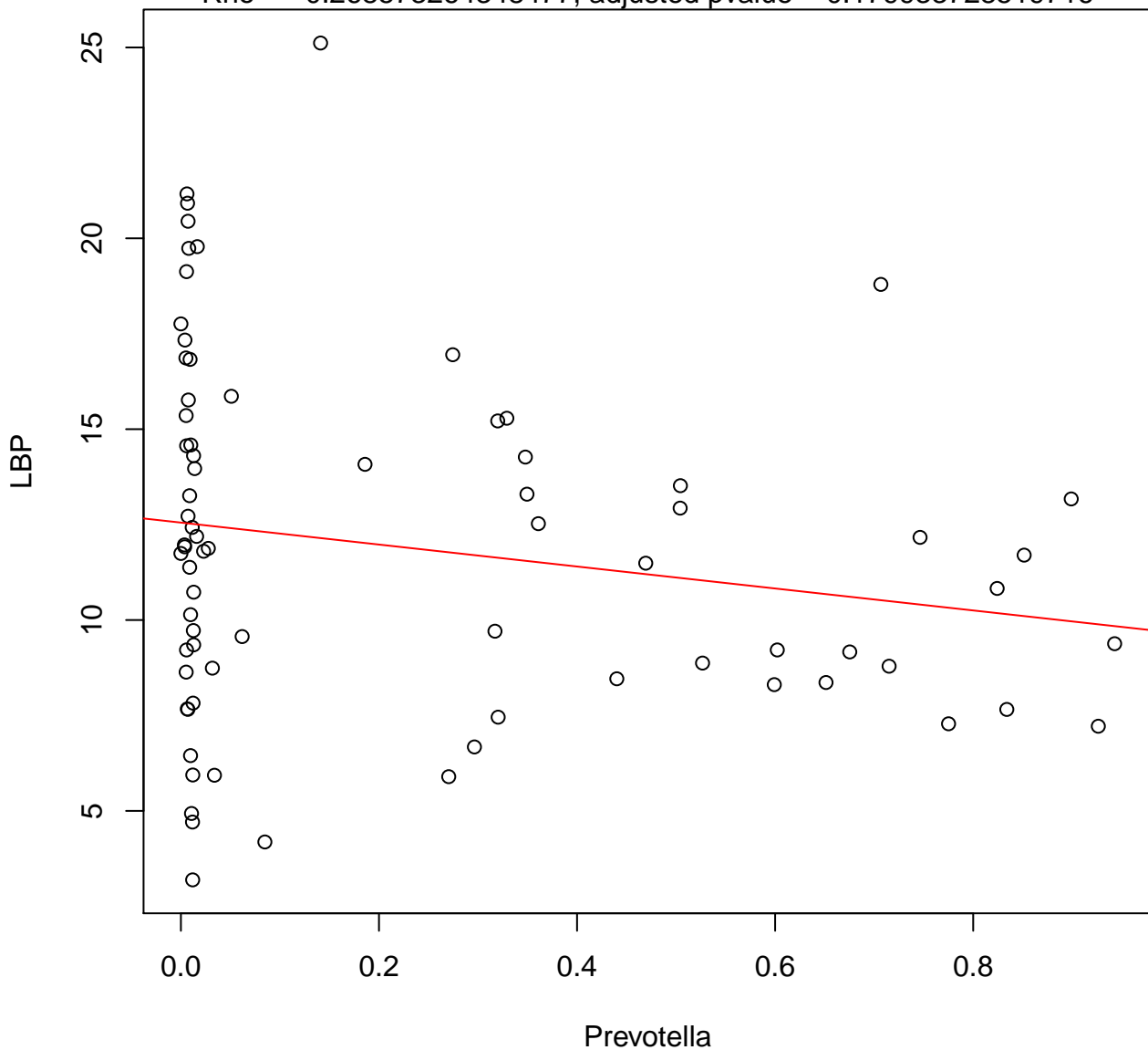
# Timepoint 2 , LBP ~ Bifidobacteriaceae

Rho = 0.373390260049353, adjusted pvalue = 0.0840621647139187



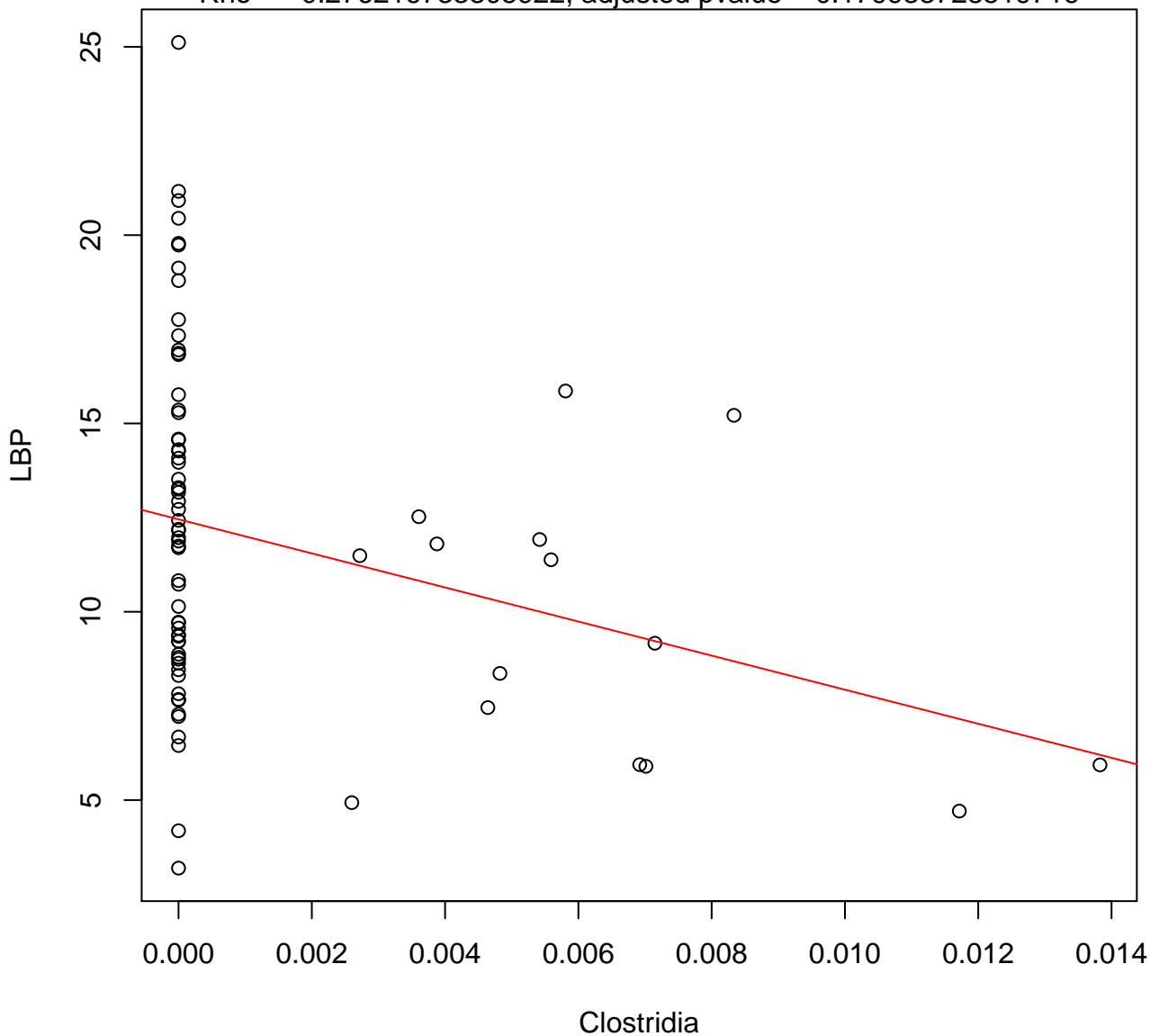
## Timepoint 2 , LBP ~ Prevotella

Rho =  $-0.268573264348477$ , adjusted pvalue =  $0.179933728519716$



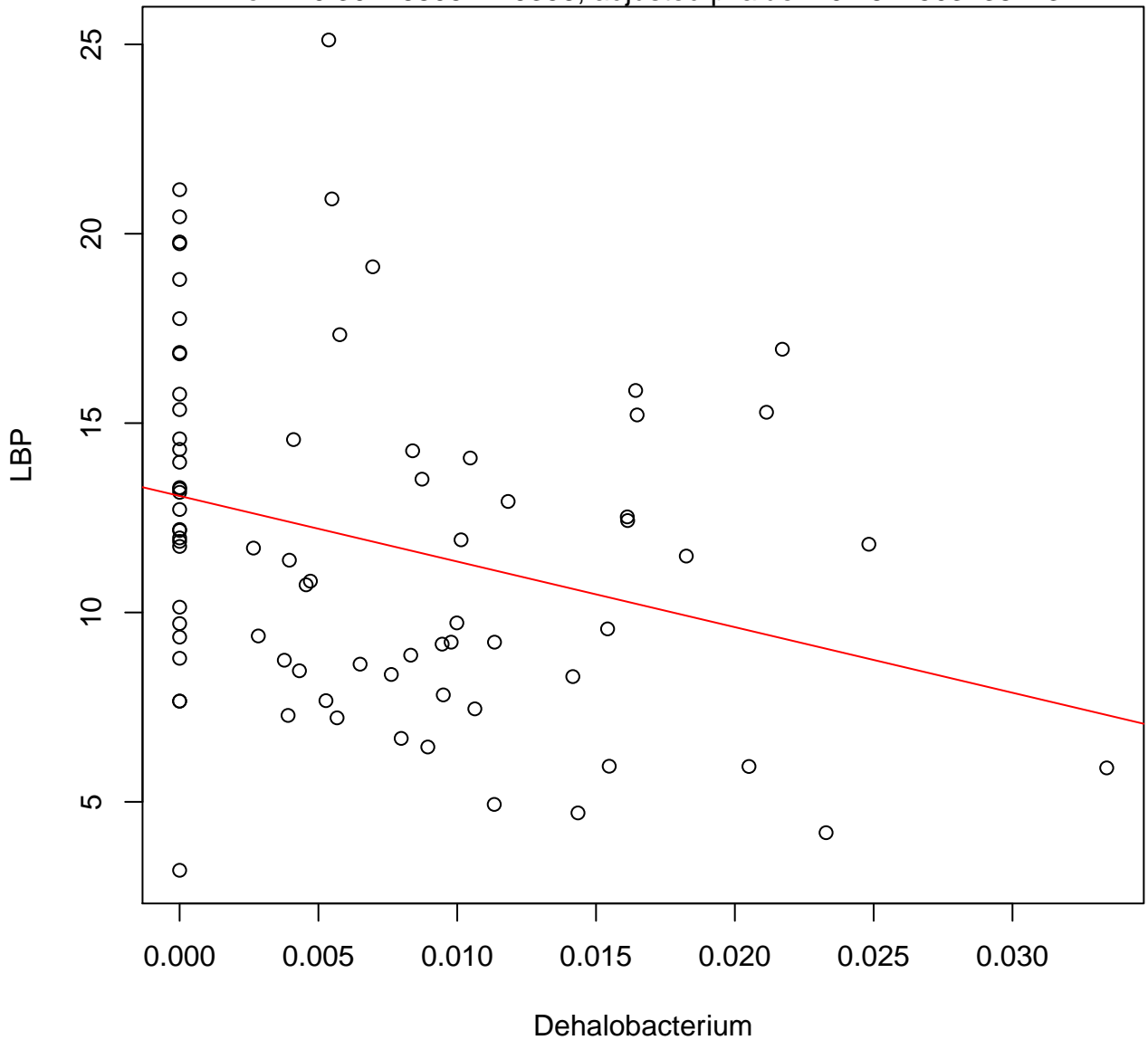
## Timepoint 2 , LBP ~ Clostridia

Rho =  $-0.276216733305922$ , adjusted pvalue =  $0.179933728519716$



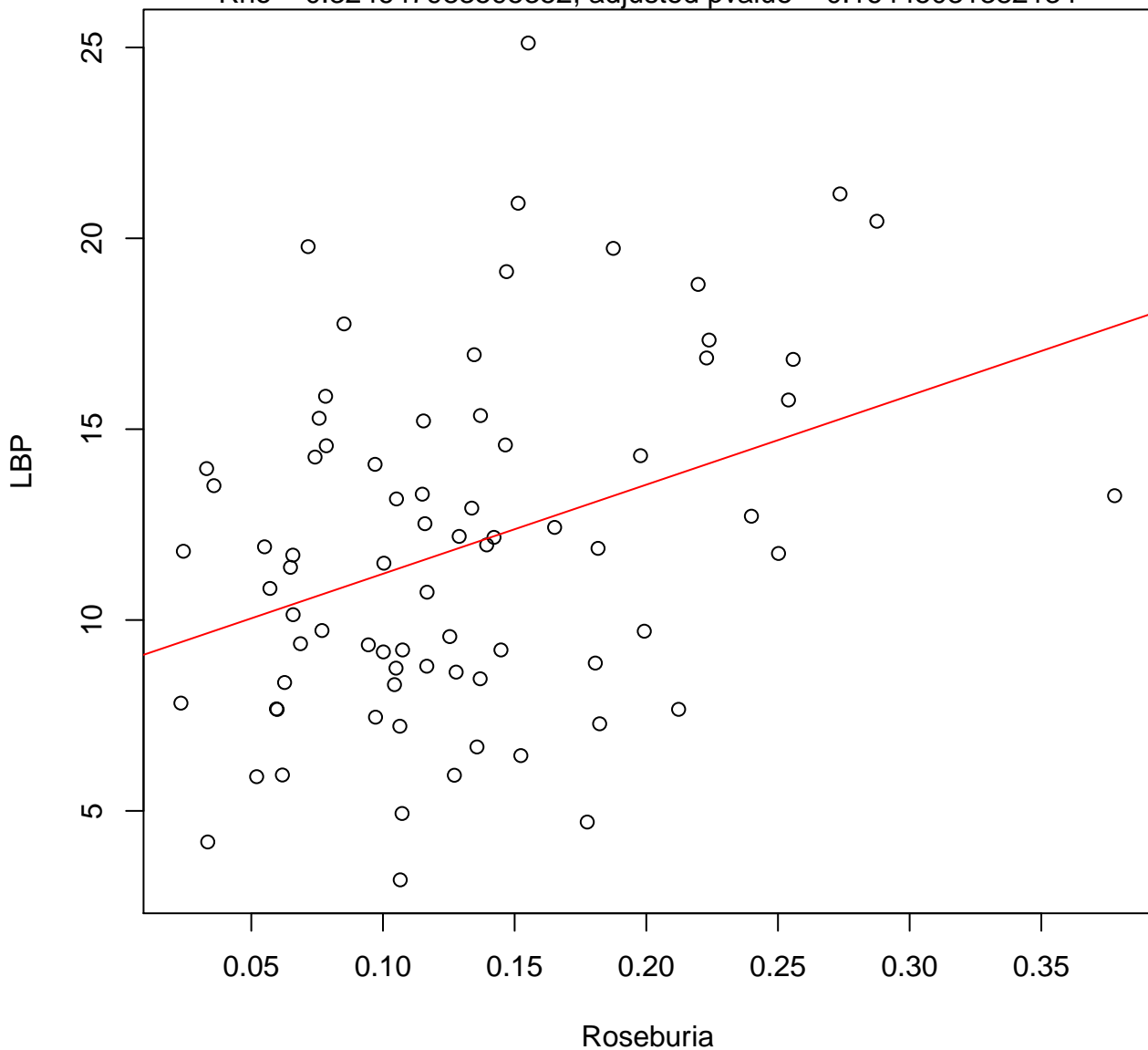
## Timepoint 2 , LBP ~ Dehalobacterium

Rho =  $-0.307268051419356$ , adjusted pvalue =  $0.16445031382134$



## Timepoint 2 , LBP ~ Roseburia

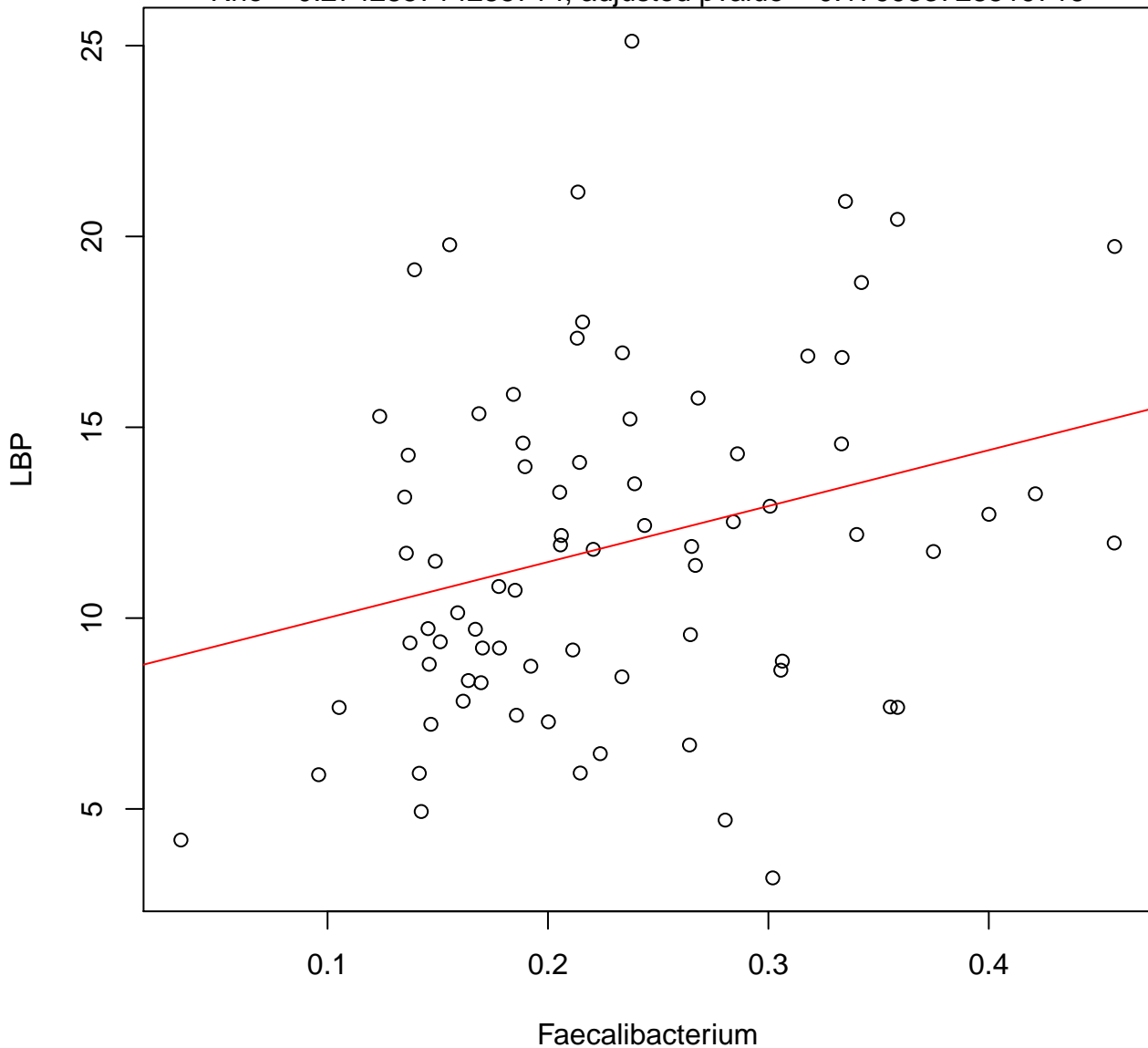
Rho = 0.324647983595352, adjusted pvalue = 0.16445031382134





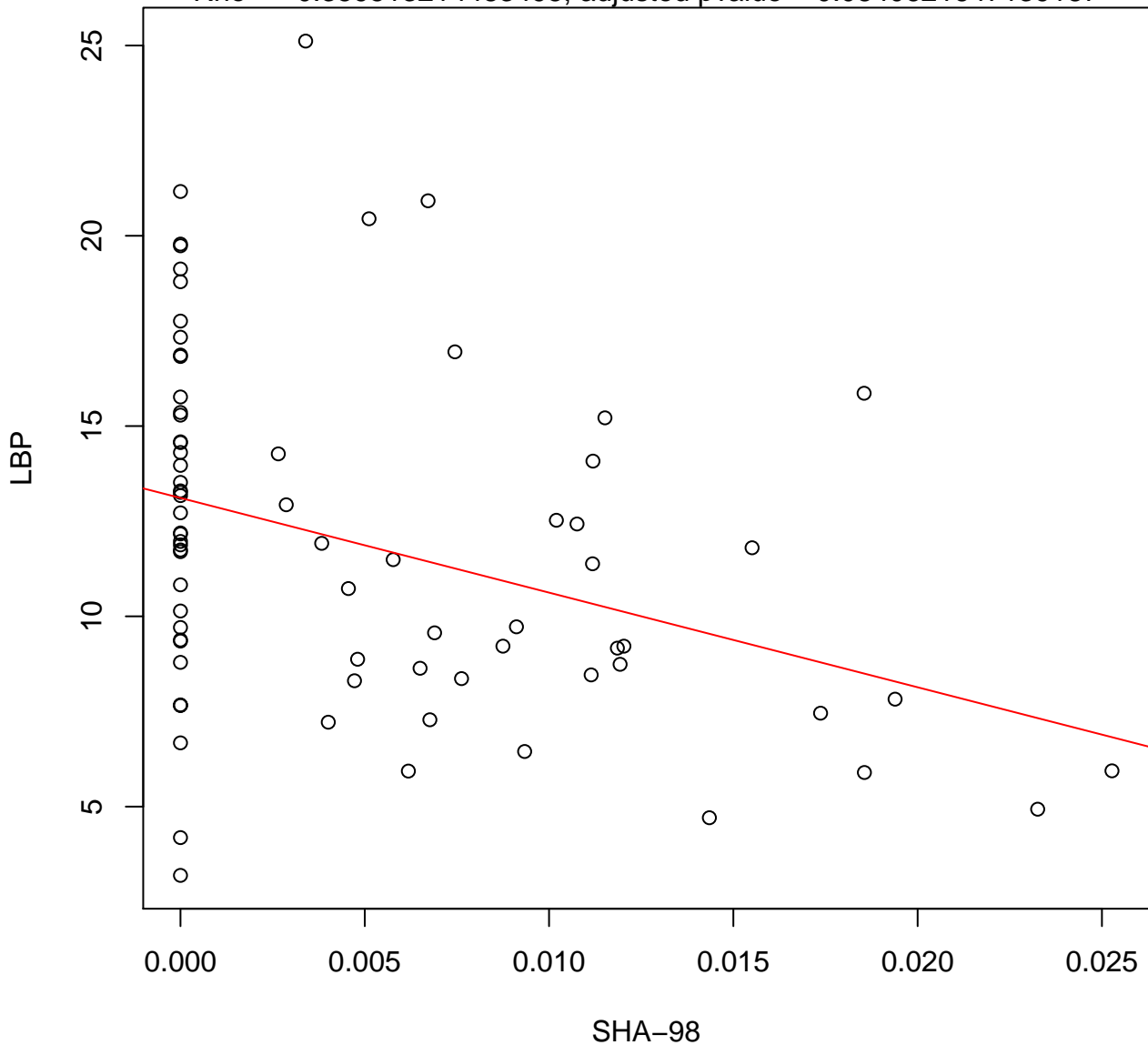
## Timepoint 2 , LBP ~ Faecalibacterium

Rho = 0.274285714285714, adjusted pvalue = 0.179933728519716



## Timepoint 2 , LBP ~ SHA-98

Rho =  $-0.359513214483495$ , adjusted pvalue =  $0.0840621647139187$



## Timepoint 2 , LBP ~ ML615J-28

Rho =  $-0.289596142082143$ , adjusted pvalue =  $0.179933728519716$

