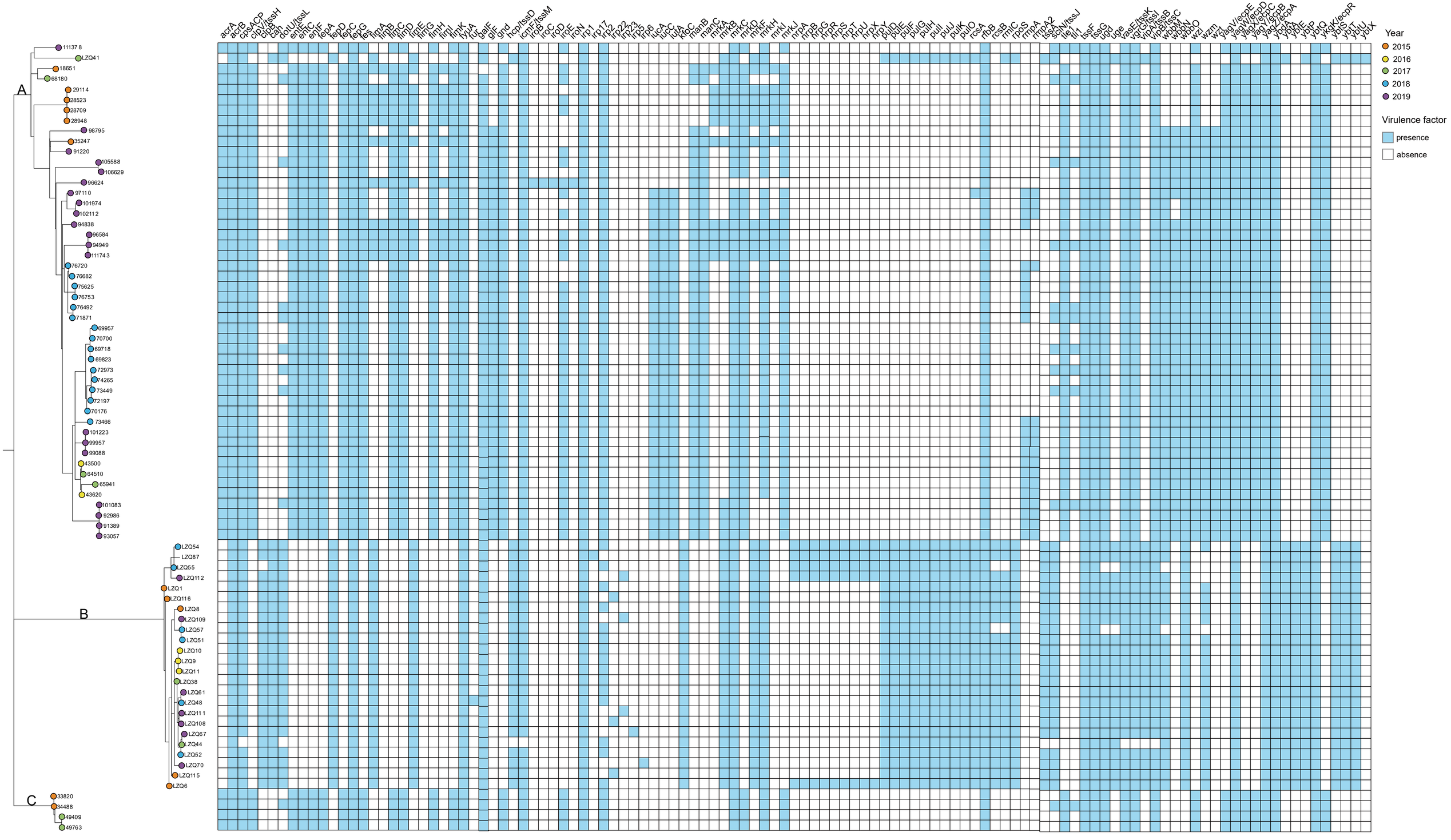
acrA
acrB
cpsACP
clpV/tssH
clpB
cah
dotU/tssL
entE
entC
entF
fepA
fepD
fepC
fepG
fes
fimA
fimB
fimC
fimD
fimE
fimG
fimH
fimI
fimK
fyuA
fuG
galF
gIF
gnd
hcp/tssD
icmF/tssM
iroB
iroC
iroD
iroE
iroN
irp1
irp17
irp2
irp22
irp23
irp5
irp6
iucA
iucC
iutA
kfoC
manB
manC
mkA
mkB
mkC
mkD
mkF
mkH
mkI
mkJ
nrpA
nrpB
nrpG
nrpR
nrpS
nrpT
nrpU
nrpX
nrpY
pilD
pilE
pilF
pilG
pilH
pilI
pilJ
pilK
pilO
rcsA
rfbB
rcsB
rmlC
rpoS
rmpA
rmpA2
tssA
sciN/tssJ
tle1
tli1
tssF
tssG
ugd
uge
vasE/tssK
vgrG/tssI
vipA/tssB
vipB/tssC
wbbM
wbbN
wbbO
wzi
wzm
wzt
yagV/ecpE
yagW/ecpD
yagX/ecpC
yagY/ecpB
yagZ/ecpA
ydiA
ybtE
ybtP
ybtQ
ykgK/ecpR
ybtS
ybtT
ybtU
ybtX
Year
2015
2016
2017
2018
2019
Virulence factor
presence
absence
A
B
C
11137 8
LZQ41
18651
68180
29114
28523
28709
28948
98795
35247
91220
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106629
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70176
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99088
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65941
43620
101083
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91389
93057
LZQ54
LZQ87
LZQ55
LZQ112
LZQ1
LZQ116
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LZQ52
LZQ70
LZQ115
LZQ6
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34488
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49763
20