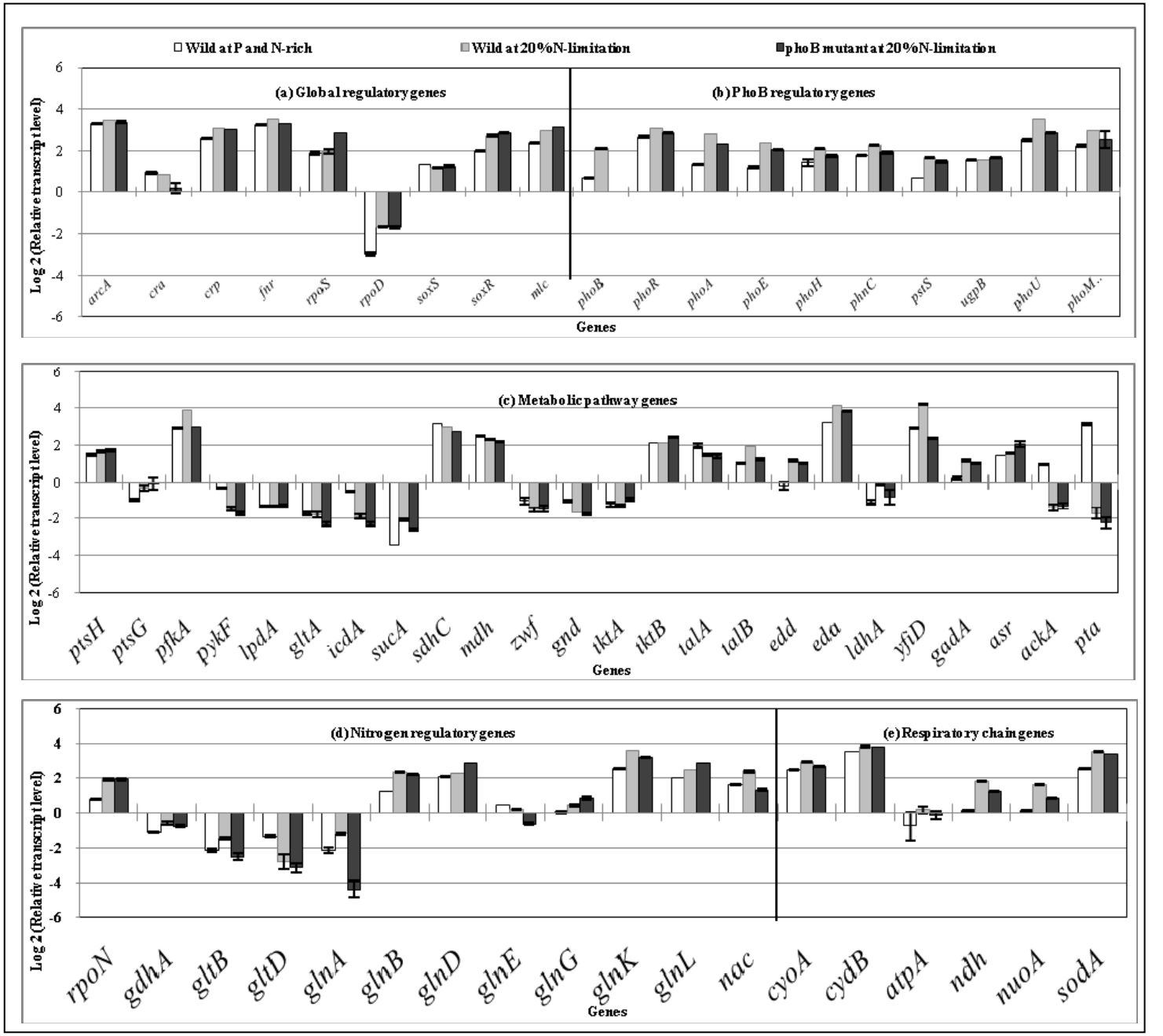
Wild at P and N-rich
Wild at 20%N-limitation
phoB mutant at 20%N-limitation
(a) Global regulatory genes
(b) PhoB regulatory genes
Log 2 (Relative transcript level)
6
4
2
0
-2
-4
-6
arcA
cra
crp
fnr
rpoS
rpoD
soxS
soxR
mlc
phoB
phoR
phoA
phoE
phoH
phnC
pstS
ugpB
phoU
phoM..
Genes
(c) Metabolic pathway genes
ptsH
ptsG
pfkA
pykF
lpdA
gltA
icdA
sucA
sdhC
mdh
zwf
gnd
tktA
tktB
talA
talB
edd
eda
ldhA
yfiD
gadA
asr
ackA
pta
(d) Nitrogen regulatory genes
(e) Respiratory chain genes
rpoN
gdhA
gltB
gltD
glnA
glnB
glnD
glnE
glnG
glnK
glnL
nac
cyoA
cydB
atpA
ndh
nuoA
sodA