Table S1. The dinamics of different cell types

Growth phases	**Type, %**			
	Elongate	**Round**	**Mycelial**	**Budding**
Log (17 h)	58	41	0,44	15,3
Deep stationary (168 h)	5	95	-	10,3

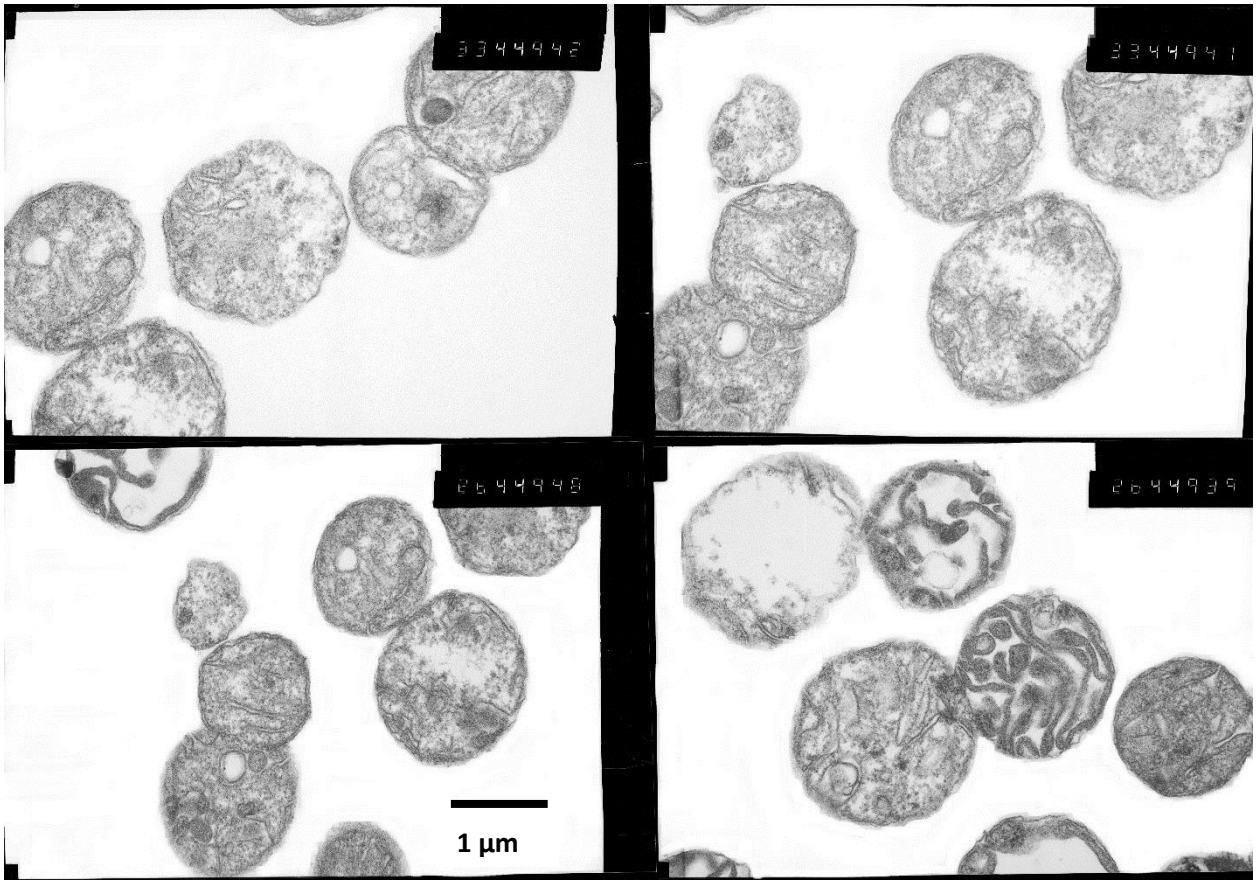
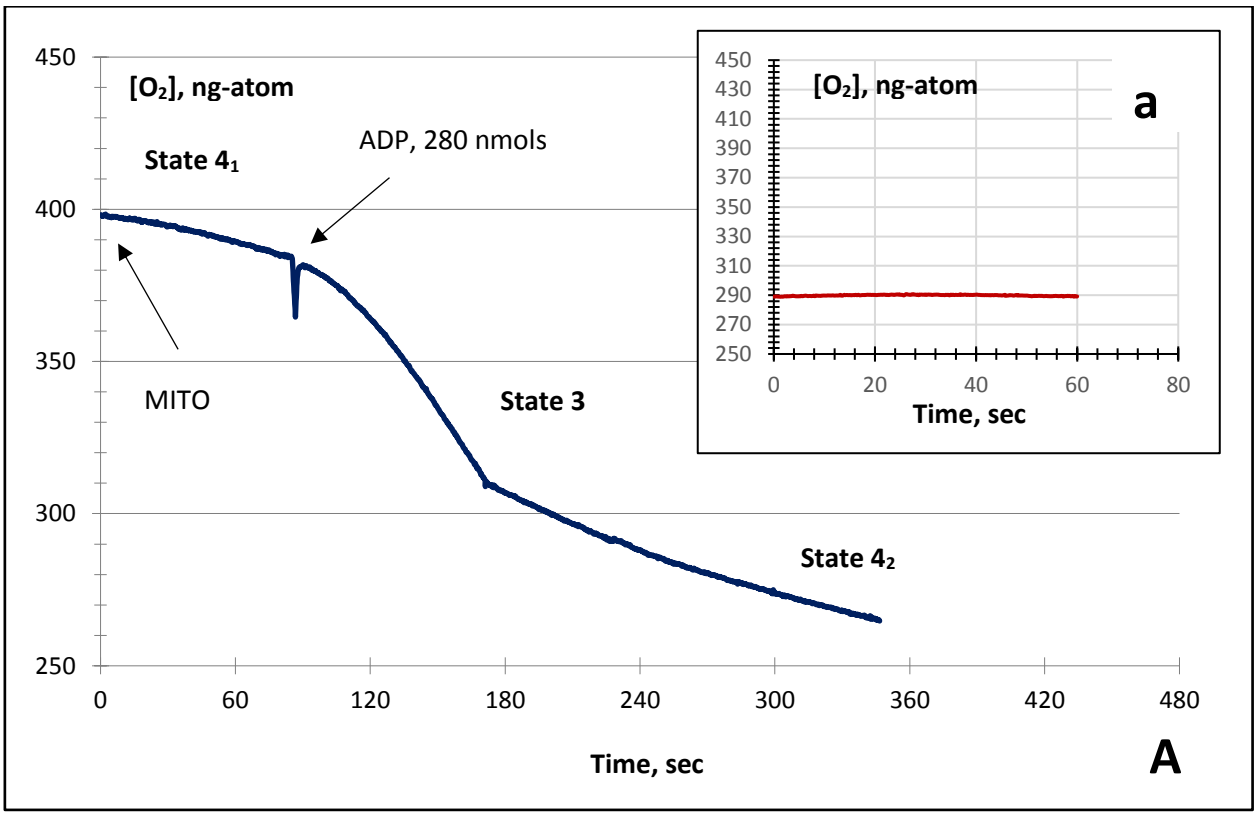
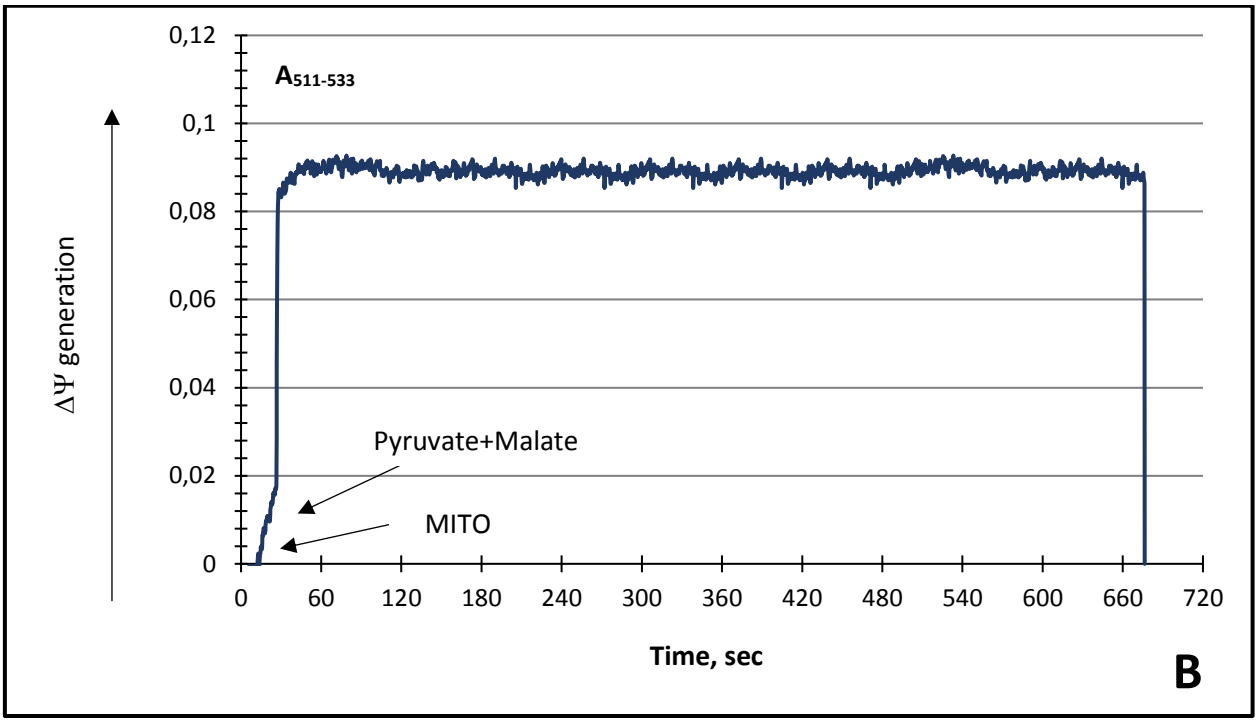


Figure S1. Micro images of transmission electron microscopy of the *E.magnusii* mitochondria fraction.


[O2], ng-atom
State 41
ADP, 280 nmols
MITO
State 3
State 42
Time, sec
A
a
[O2], ng-atom
Time, sec


A511-533
ΔΨ generation
Pyruvate+Malate
MITO
Time, sec
B

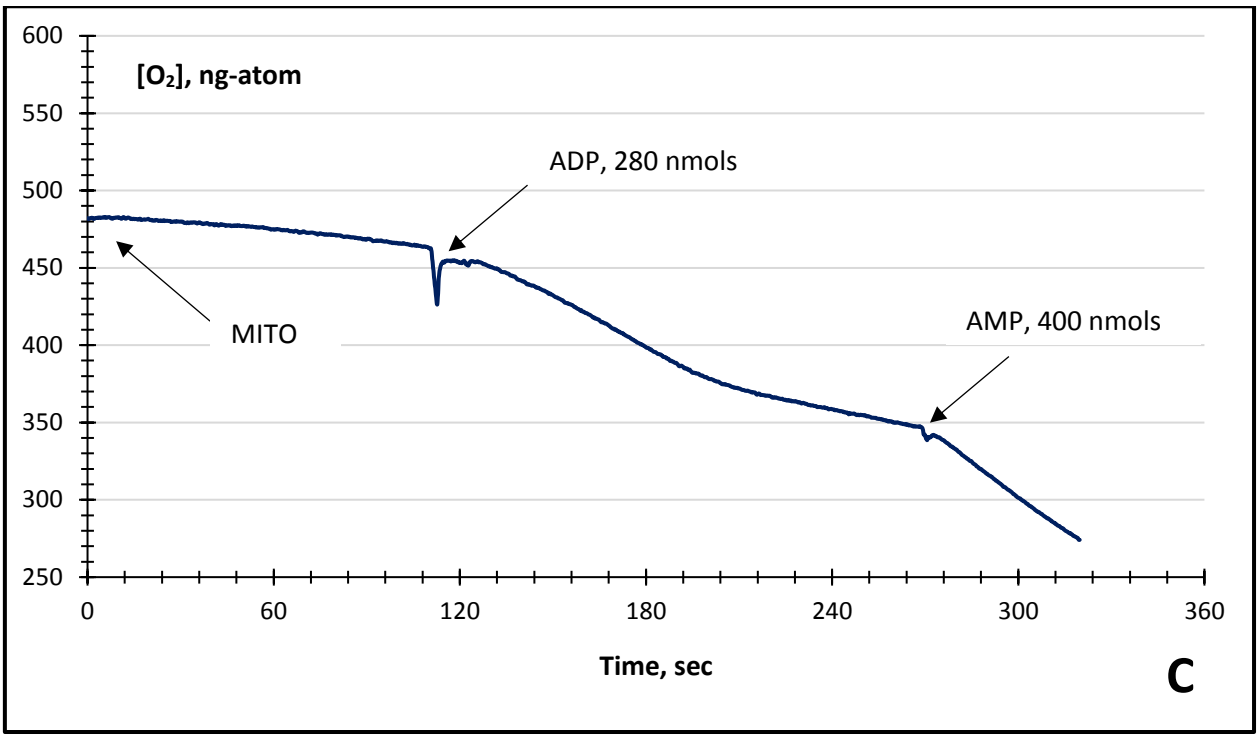


Figure S2. A - Amperometric recording of oxygen consumption by the *E. magnusii* mitochondria respiring on pyruvate + malate. Numbers adjacent to traces are respiration rates in ng-atoms of O/min/mg of mitochondrial protein. The incubation medium contained 0.6 M mannitol, 0.2 mM Tris-phosphate, pH 7.2; 20 mM pyruvate + 5 mM malate as respiratory substrates, and mitochondria corresponding to 0.5 mg mitochondrial protein, added at MITO. The frame in the Figure (a) shows the curve of oxygen consumption without substrate application (endogenous respiration). **B** - Recording of $\Delta\Psi$ generated by the *E.magnusii* mitochondria respiring on a 20 mM pyruvate + 5 mM malate. The incubation medium contained 0.4 M mannitol, 0.1 M KCl, 20 mM Tris-acetate, 0.4 mg of mitochondria protein, pH 7.4. **C** – the demonstration of the adenilate kinase activity in the intact mitochondria (the incubation medium composition is as in **A).**

Table S2. The phosphorylating activities of the mitochondria using different substrates

Substrates	**State 3, ng-atom O/ min per 1·mg of protein**	**Respiration control**	**ADP/O**
Pyruvate + Malate	467±71	3,4±0,3	2,5±0,2
α-ketoglutarate	423±5	4,3±0,6	3,3±0,4
NADH	725±81	1,9±0,2	1,8±0,1
Succinate + glutamate	628±54	1,9±0,1	2,0±0,1
α-glycerophosphate	405±24	1,9±0,3	1,7±0,2

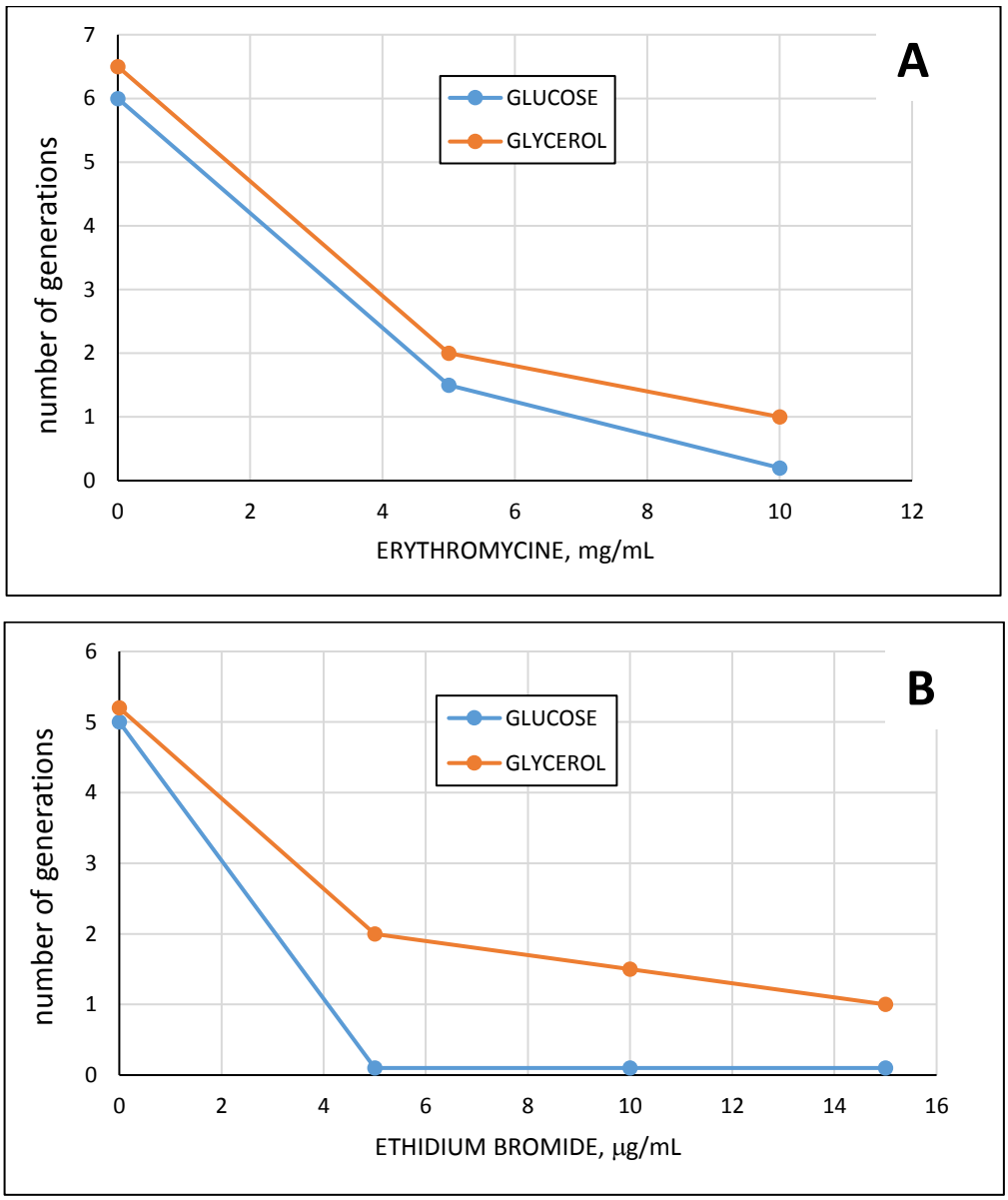


Figure S3. Effect of erythromycin (A) and ethidium bromide (B) on the *E. magnusii* cell growth.