

## **RESULTS**

Table (2): Morphological, physiological and biochemical characters of group (1<sub>a</sub>) isolated from naturally infected *Tilapia (Oreochromis niloticus)*.

Test	Reaction
<b>Morphological characteristics:</b>	
-Gram reaction	Negative
- motility	+
- Cell shape	Short rods
-Spore former	Non-spore former
-Diffusible pigment	Blue-green
<b>Physiological characteristics:</b>	
<b>A- Enzymes activity</b>	
Protein hydrolysis	+
Starch hydrolysis	-
Lipid hydrolysis	+
Egg-yolk (Lecithin) hydrolysis	-
Oxidase test	+
Catalase test	+
<b>B- Pigment production:</b>	
Pyocyanin pigment	+
Caroten pigment	+
Fluorescent pigment	+
<b>Biochemical characteristics:</b>	
- Degradation of Esculine	+
- Gelatin liquefaction	+

- H <sub>2</sub> S production	+
- Nitrate reduction	+
- Urea test	-
- Indole production	-
- Levan formation from sucrose	-
- Arginine dihydrolase	+
- Poly $\beta$ -hydroxy butyrate accumulation	-
- Utilization of KCN	+
- Citrate utilization	+
- Phenyl alanine deamination	+
- Voges-proskauer test	-
- Methyl red test	-
<b>Utilization of carbon sources:</b>	
L-Arabinose	-
D-Xylose	-
D- Ribose	+
D- Mannose	-
D- Glucose	+
D- Fructose	+
D- Galactose	-
- Mannitol	+
- <i>meso</i> -Inositol	-
- Sucrose	-
- Maltose	-
- Lactose	-
- Raffinose	-

- Trehalose	-
- Melibiose	-
- Starch	-
<b>Utilization of nitrogen source</b>	
- Glycine	-
L-Alanine	-
L-Serine	+
L-Leucine	-
L-valine	+
L-lysine	+
L-proline	+
L-Tyrosine	+
L-Arginine	+
<b>Growth in presence of different NaCl concentrations ( % ):</b>	
1	+
3	+
5	+
7	-
<b>Growth at different temperature ( °C)</b>	
20-40	+
41	+

+ = Positive reaction

- = no reaction.

From this table the characteristic of isolates was those of *pseudomonas aeruginosa*.