





the qualitative method. Those isolates belonging to *Haladaptatus*, *Halalkalicoccus*, *Haloarchaeobius*, *Haloarcula*, *Halobacteriaceae*, *Halobaculum*, *Halobium*, *Halococcus*, *Haloferax*, *Halogeometricum*, *Halogramum*, *Halomarina*, *Halorubrum*, *Halostagnicola*, *Haloterrigena*, *Halovivax*, and *Natrialba*.

This screening process gave a result that 9 isolates of halophilic archaea have an L-asparaginase enzyme activity. The qualitative analysis result shows that 9 isolates have an L-asparaginase enzyme activity (**Fig. 1**). Those 9 isolates make color changes from yellow to slightly red around of the colony grow area.

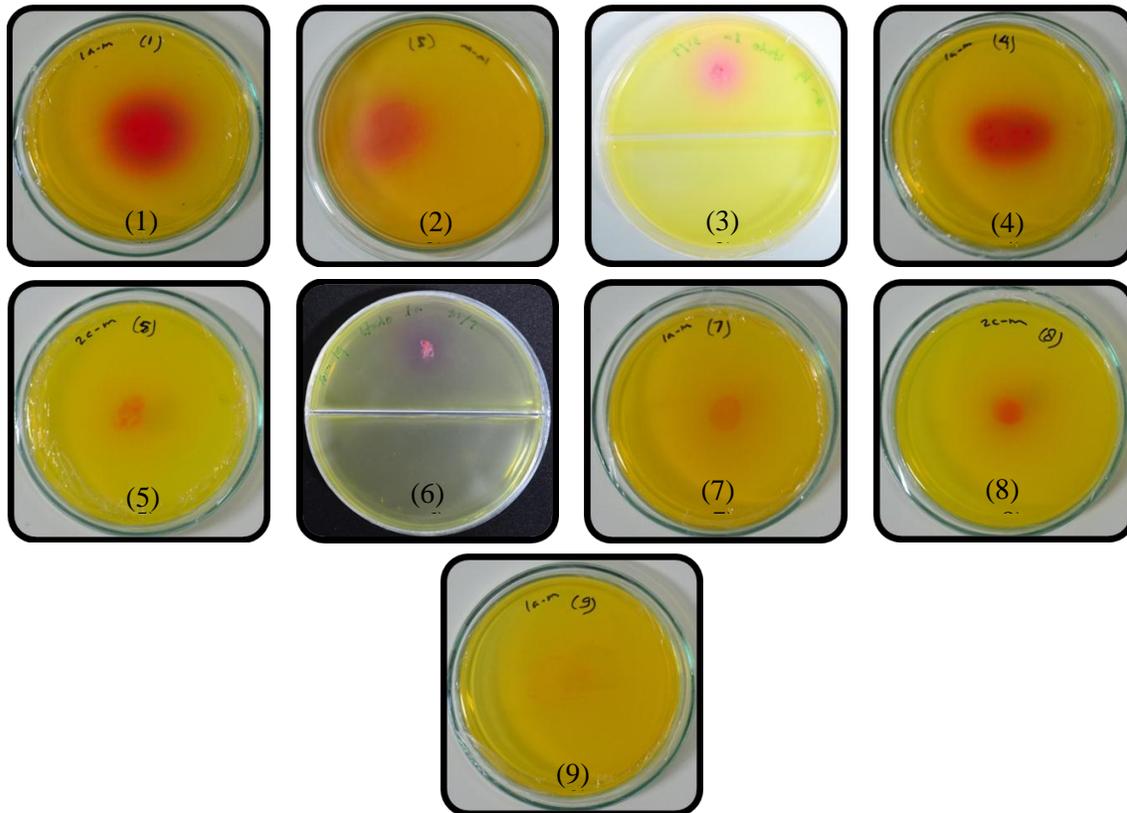


Fig. 1: (1) 1a\_35, (2) 1a\_43\_1, (3) 2c\_61\_2, (4) 1a\_43\_2, (5) 2\_36\_4, (6) 1a\_37, (7) 1a\_31\_1, (8) 2c\_11\_1, (9) 1a\_23\_1

The identification process for 9 isolates of halophilic archaea by molecular approach shows that those isolates are belonging to *Halostagnicola*, *Halococcus*, *Halobaculum*, *Halalkalicoccus*, *Haloferax*, and *Halogramum* (**TABLE** ).

TABLE I: Molecular Identification Result

No	Isolate	Identification Result	Similarity (%)	acc. No
1	1a-35	<i>Halostagnicola kamekurae</i>	99	AB663440.1
2	1a-43-1	<i>Halococcus hamelinensis</i>	99	KJ875309.1
3	2c-61-2	<i>Halococcus</i> sp.	100	KJ875346.1
4	1a-43-2	<i>Halobaculum</i> sp.	97	KY114620.1
5	2c-36-4	<i>Halococcus thailandensis</i>	99	JX481758.1
6	1a-37	<i>Halalkalicoccus paucihalophilus</i>	99	JF449426.1
7	1a-31-1	<i>Haloferax</i> sp.	99	DQ373057.1
8	2c-11-1	<i>Halogramum rubrum</i>	99	NR_113453.1
9	1a-23-1	<i>Halogramum</i> sp.	100	KJ917655.1





