

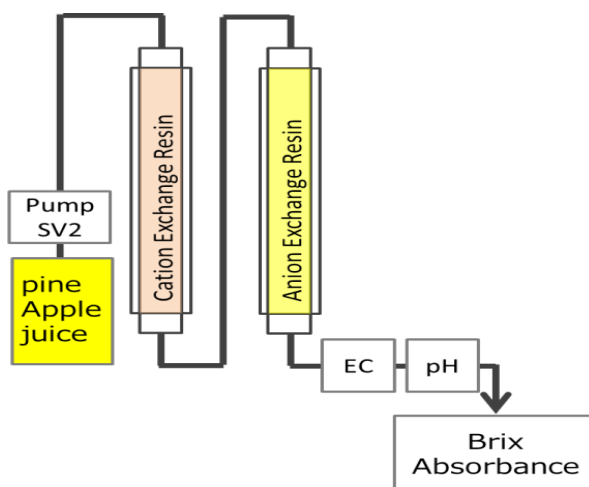
# Desalination of Pineapple Juice

## Analysis of Pineapple Juice

Brix	%	10.3
Electrical conductivity	$\mu\text{S}/\text{cm}$	5,310
pH	-	4.36
Absorbance $A_{420}^{10}$	-	0.510
Total Cation	mg-CaCO <sub>3</sub> /L	3,375
Total Anion	mg-CaCO <sub>3</sub> /L	5,846
Weak acid	mg-CaCO <sub>3</sub> /L	1,642
Glucose	%	3.8
Fructose	%	2.2

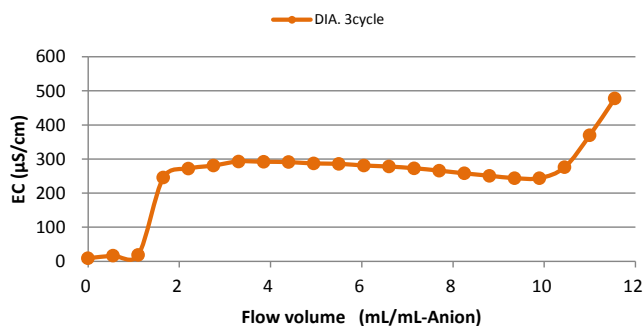
## Flowchart of Desalination of Pineapple Juice

Process : 2B2T [Cation IER → Anion IER]  
Resins : Cation exchange resin PK216  
Anion exchange resin WA30

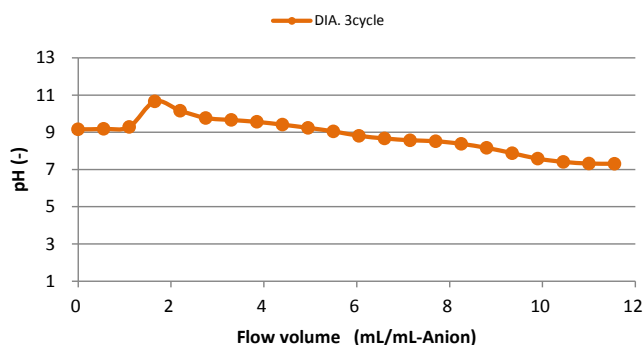


## Results of desalination(1)

### Electrical conductivity (EC)



### pH versus Flow volume

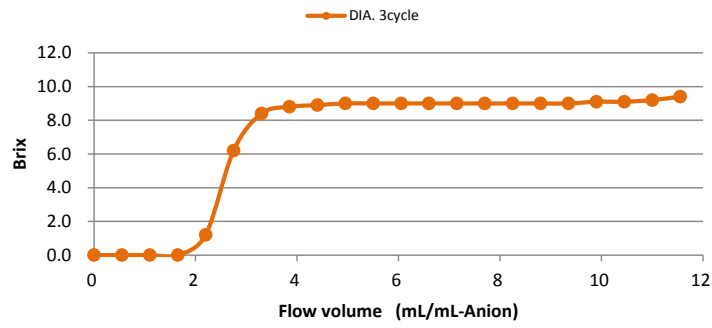


### Ion chromatography analysis

	Ion (ppm)	Standard solution	After treatment
Anion	Cl <sup>-</sup>	650	1.3
	NO <sub>3</sub> <sup>-</sup>	38	0.33
	PO <sub>4</sub> <sup>2-</sup>	320	<0.1
	SO <sub>4</sub> <sup>2-</sup>	690	0.37
	Malic acid	2000	<0.1
	Citric acid	2000	0.56
Cation	Na <sup>+</sup>	220	2.5
	K <sup>+</sup>	1900	97
	Ca <sup>2+</sup>	96	<0.1
	Mg <sup>2+</sup>	100	0.1

# Results of desalination(2)

## Brix versus Flow volume



## the change of the color



## Removal rate(Decolorization rate)

