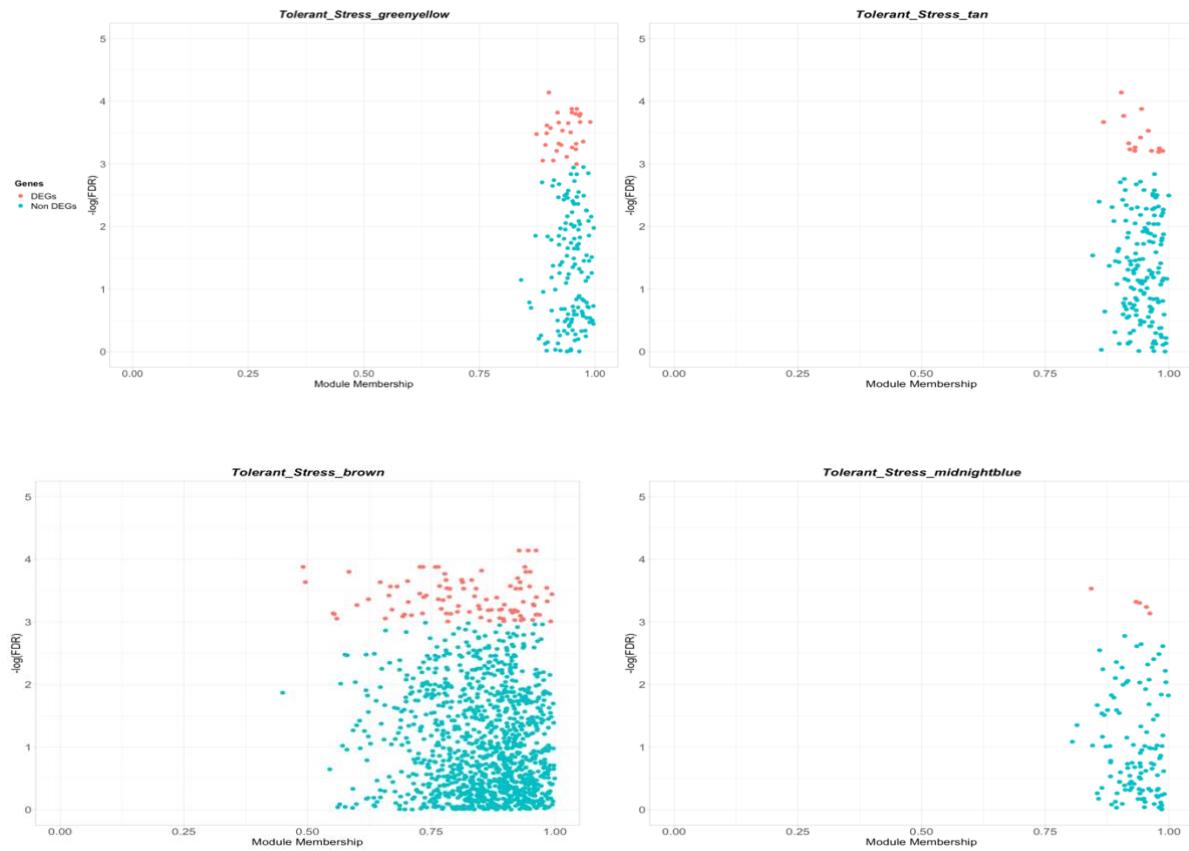
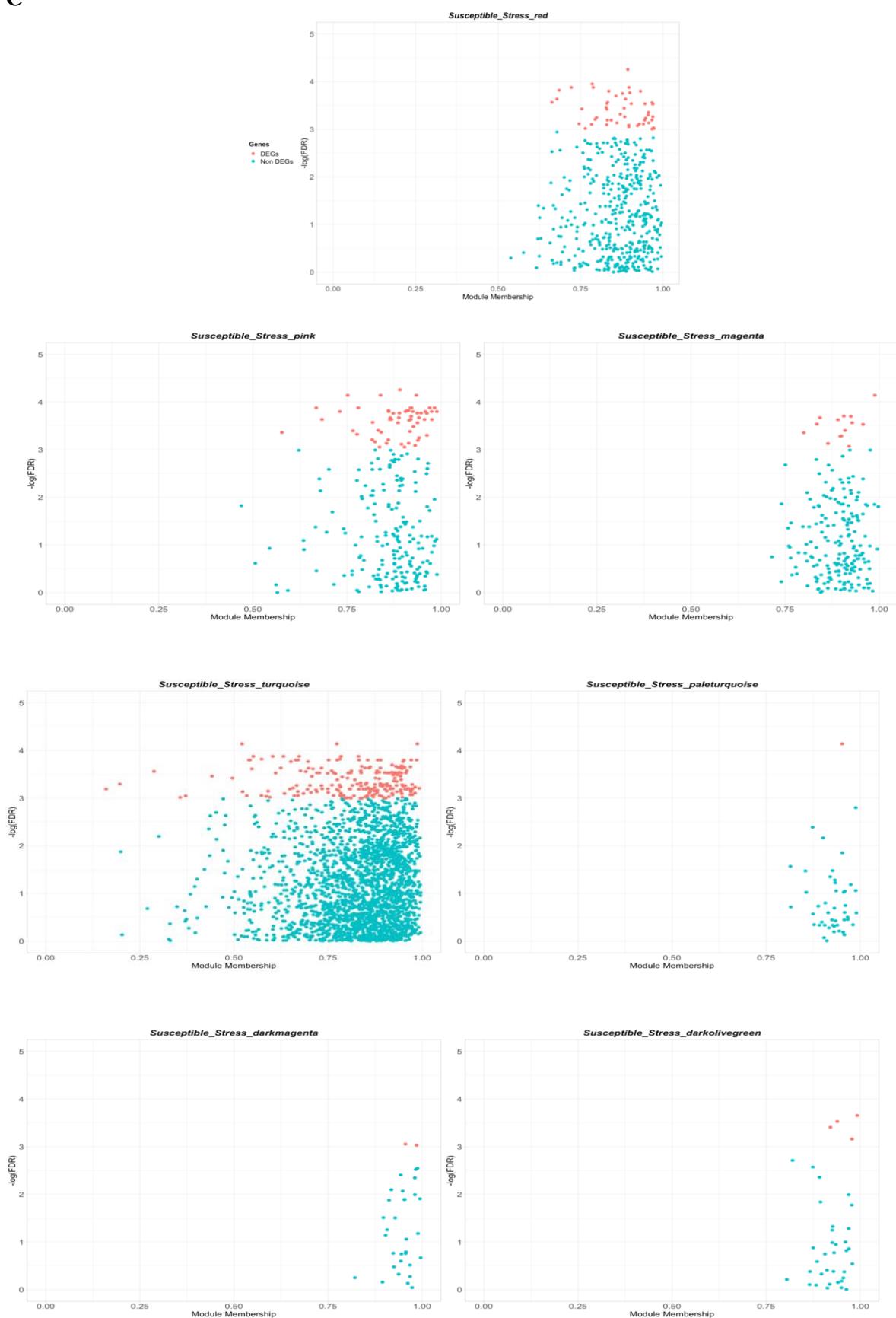


**A****B**

<b>Module</b>	<b>Semen Parameter</b>	<b>Correlation</b>	<b>P-value</b>	<b>Genes</b>	<b>DEGs</b>
Greenyellow	Total Sperm	-0.88	0.05	168	30
Tan	Motility	0.88	0.05	167	14
Midnightblue	Normal Morphology	-0.93	0.02	120	5
	Droplets	0.93	0.02		
Brown	Reject Ejaculate	-0.89	0.04	1234	98

**C**

**D**

<b>Module</b>	<b>Semen Parameter</b>	<b>Correlation</b>	<b>P-value</b>	<b>Genes</b>	<b>DEGs</b>
Red	Total Sperm Motility	0.87 -0.84	0.02 0.04	480	51
Pink	Total Sperm Rejected Ejaculate	-0.94 0.91	0.005 0.01	250	58
Magenta	Motility	-0.88	0.02	199	14
Turquoise	Motility	-0.86	0.03	2380	214
Paleturquoise	Normal Morphology Droplets	0.85 -0.84	0.03 0.04	46	1
Darkmagenta	Normal Morphology Droplets	0.85 -0.81	0.03 0.05	33	2
Darkolivegreen	Normal Morphology Droplets	0.92 -0.92	0.01 0.01	38	4