

Appendice 1a- Sulfate concentration curves for *D. vulgaris*

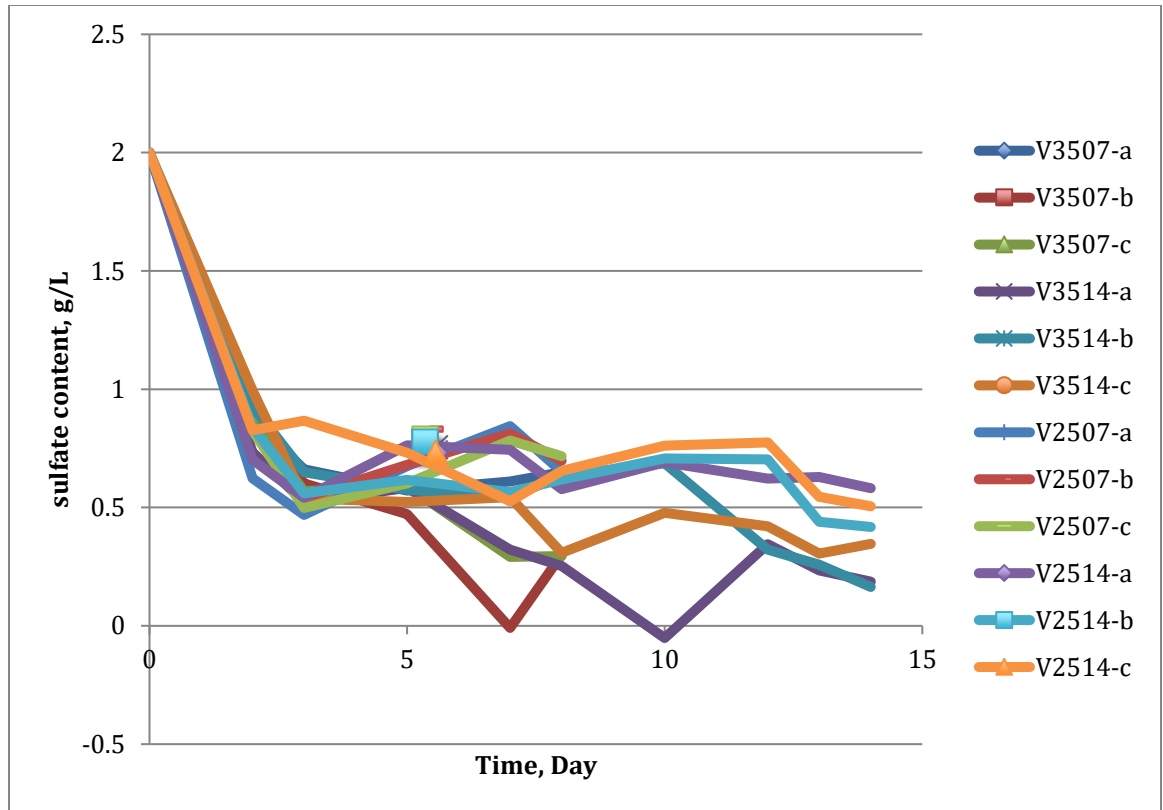


Figure 1- Sulfate concentration curve for *D. vulgaris* in 1249 media

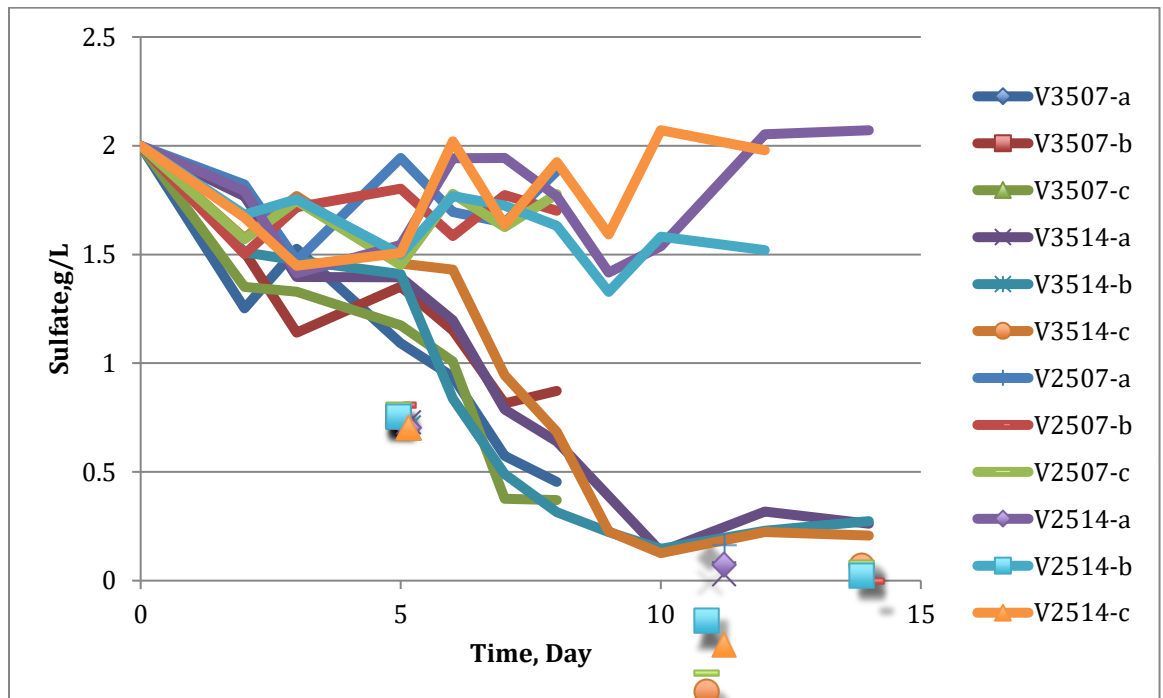


Figure 2- Sulfate concentration curve for *D. vulgaris* in 1249-LF media

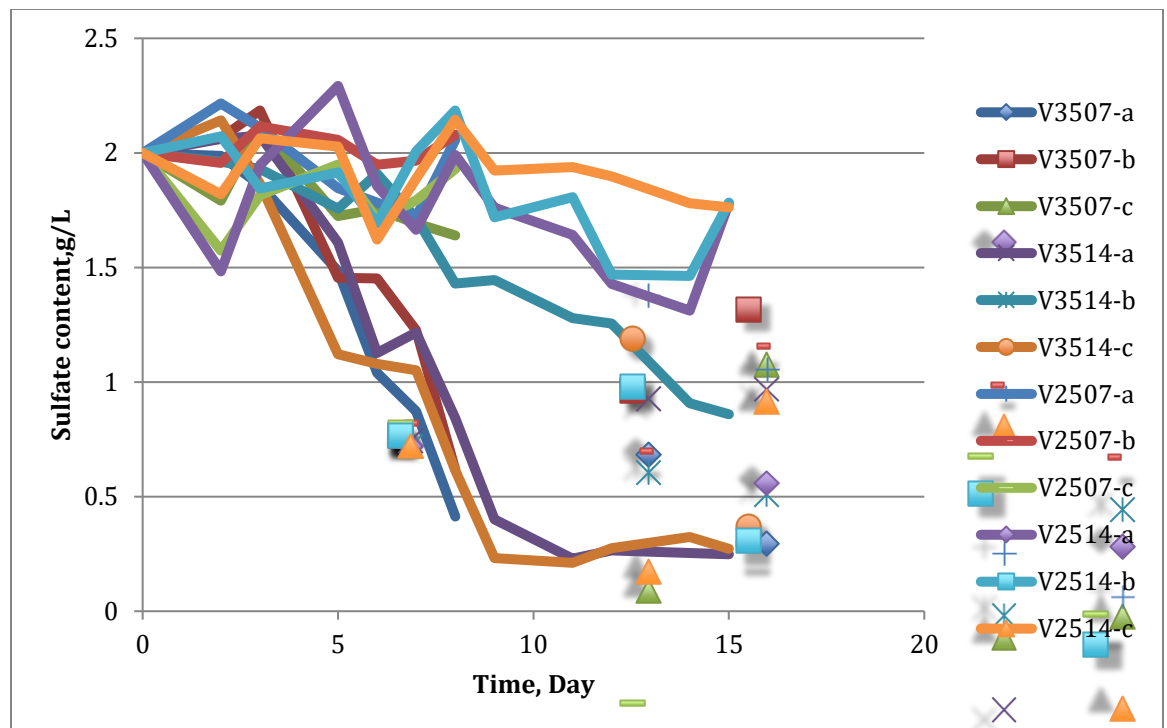


Figure 3- Sulfate concentration curve for *D. vulgaris* in 1249-LFR media

Appendice 1b- Sulfate concentration curves for *D. bastinii*

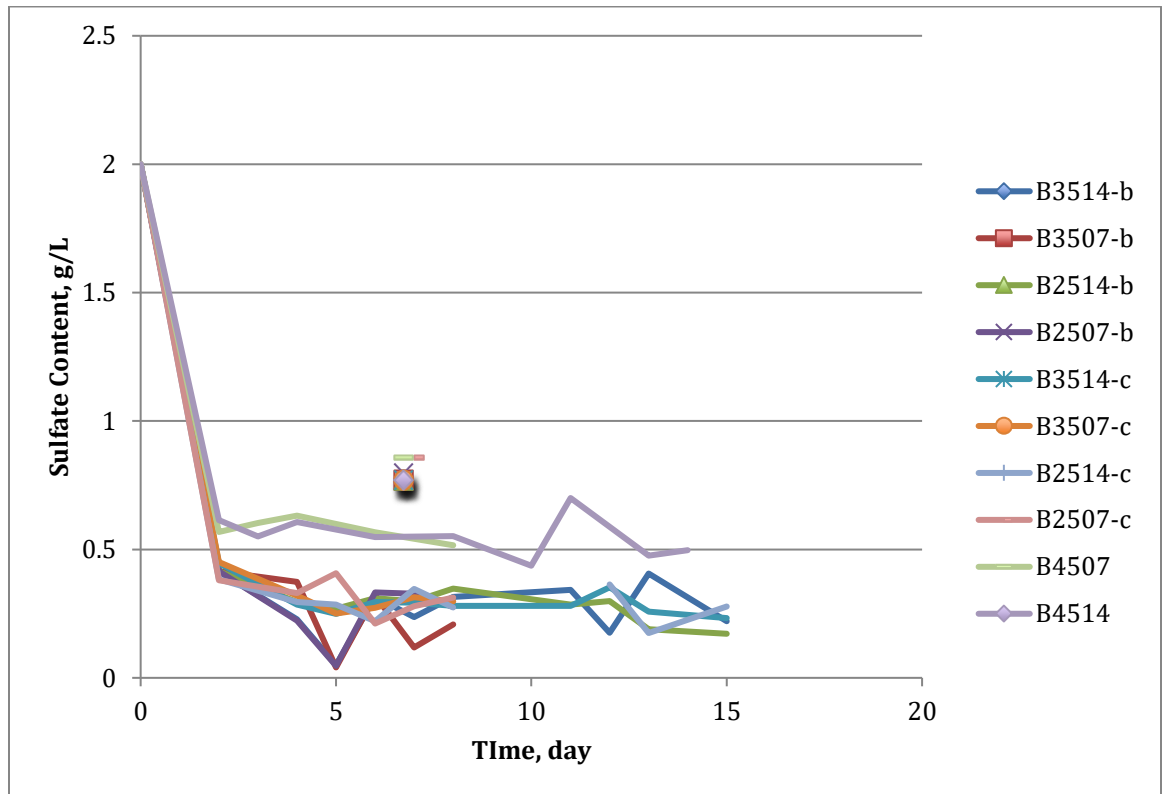


Figure 4- Sulfate concentration curve for *D. bastinii* in 1250 media

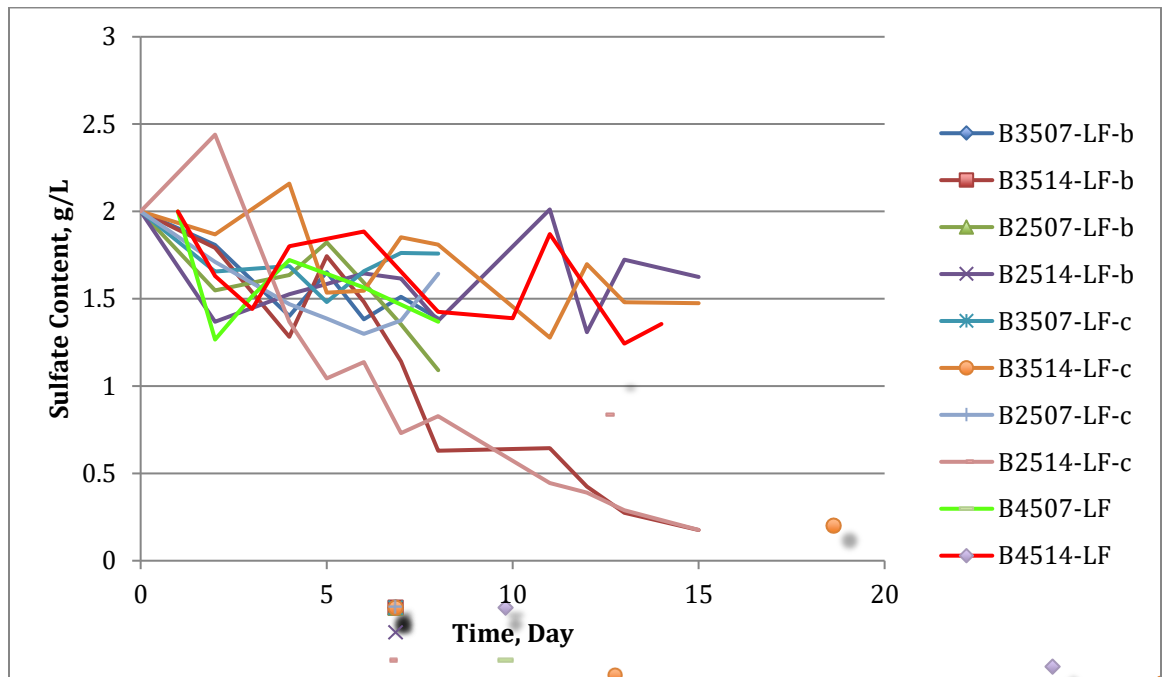


Figure 5- Sulfate concentration curve for *D. bastinii* in 1250-LF media

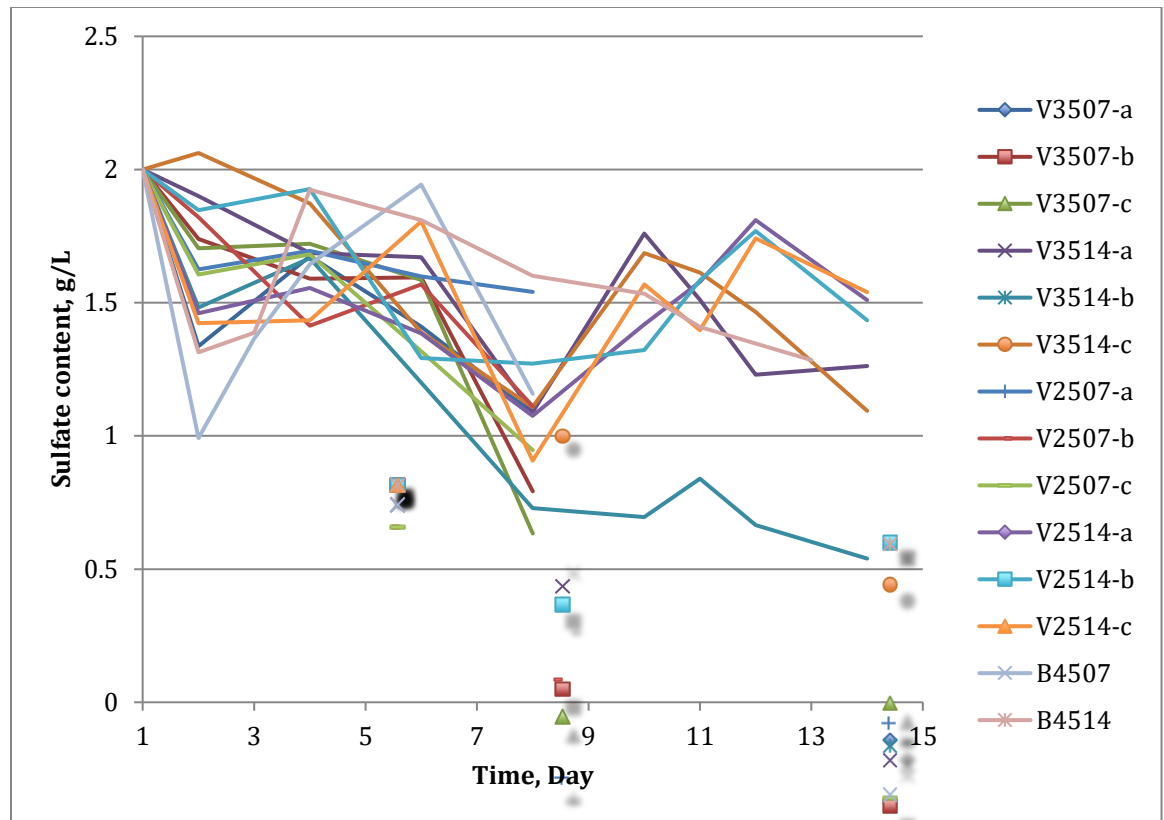


Figure 6- Sulfate concentration curve for *D. bastinii* in 1250-LFR media

Appendix 2a
Mass loss graph for *D. vulgaris*

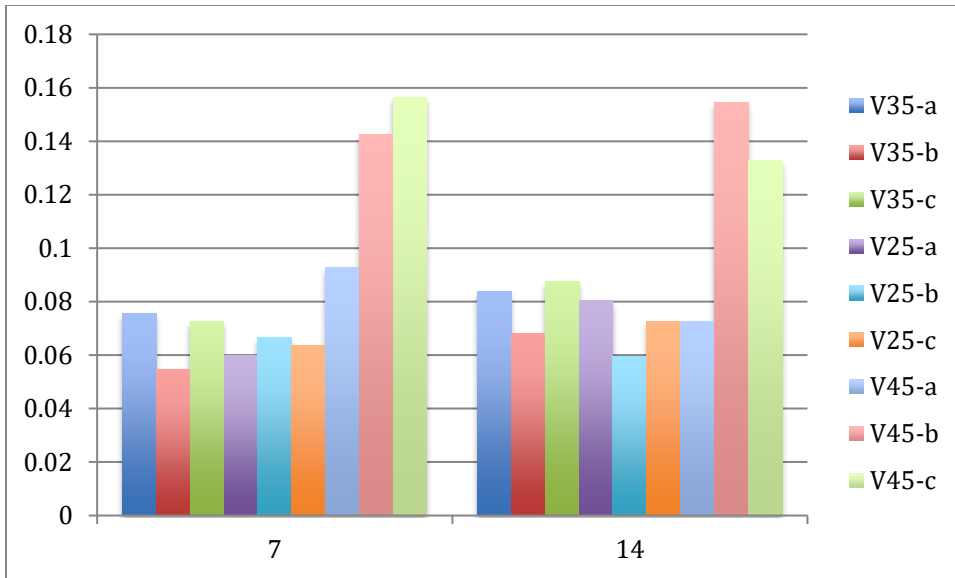


Figure 7- Mass loss (g) for 7 and 14 days in 1249 media for *D.vulgaris*

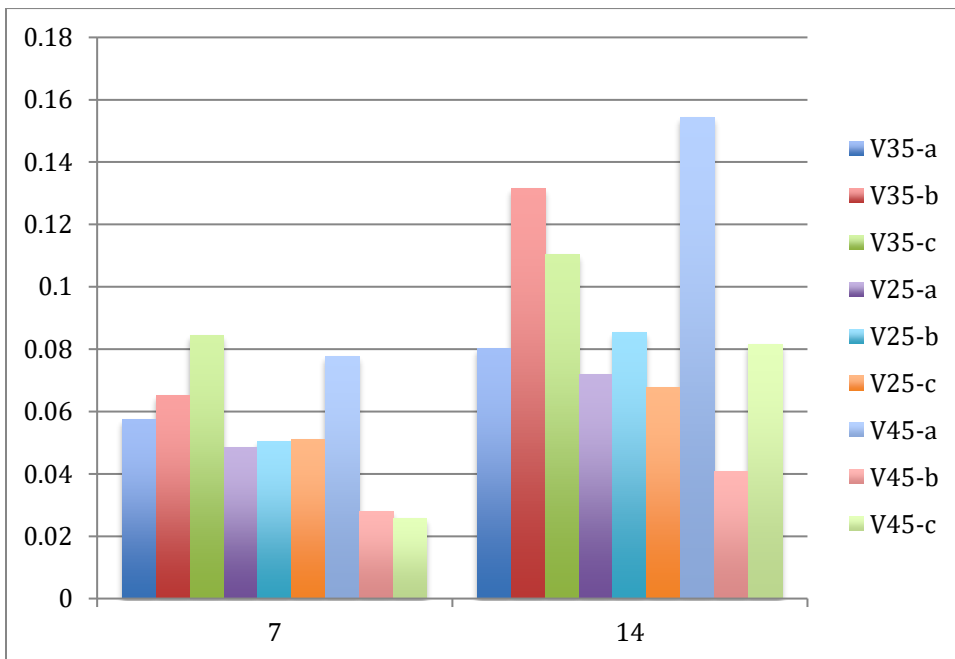


Figure 8- Mass loss (g) for 7 and 14 days in 1249-LF media for *D.vulgaris*

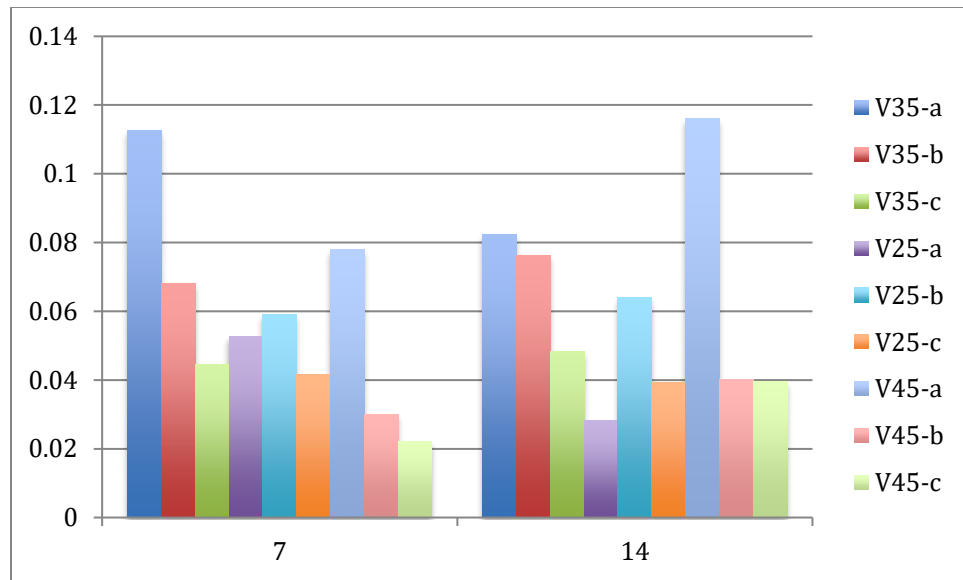


Figure 9- Mass loss (g) for 7 and 14 days in 1249-LFR media for *D.vulgaris*

Appendix 2b
Mass loss graph for *D. bastinii*

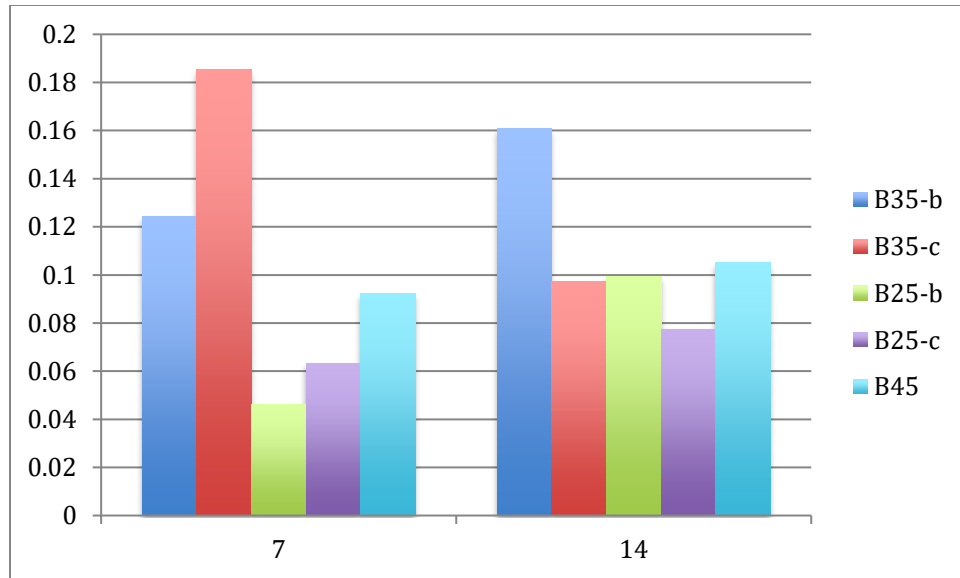


Figure 10- Mass loss (g) for 7 and 14 days in 1250 media for *D.bastinii*

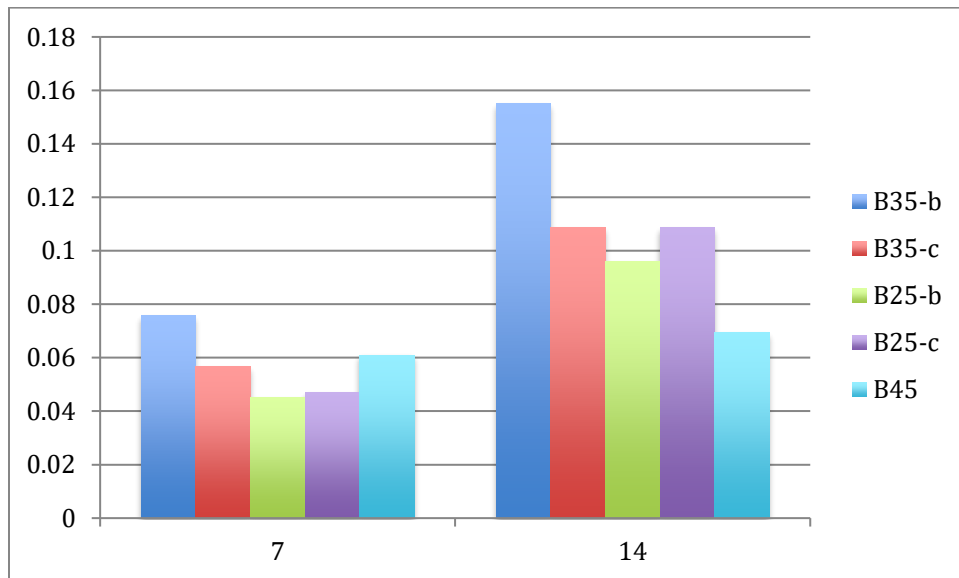


Figure 11- Mass loss (g) for 7 and 14 days in 1250-LF media for *D.bastinii*

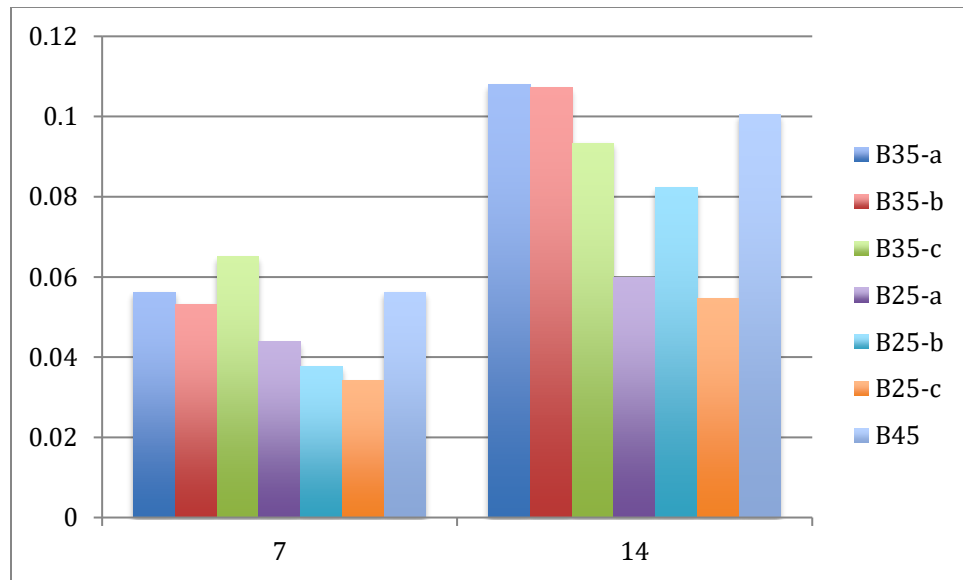


Figure 12- Mass loss (g) for 7 and 14 days in 1250-LFR media for *D.bastinii*

Appendix 3

Activation energy plots for *D. vulgaris*

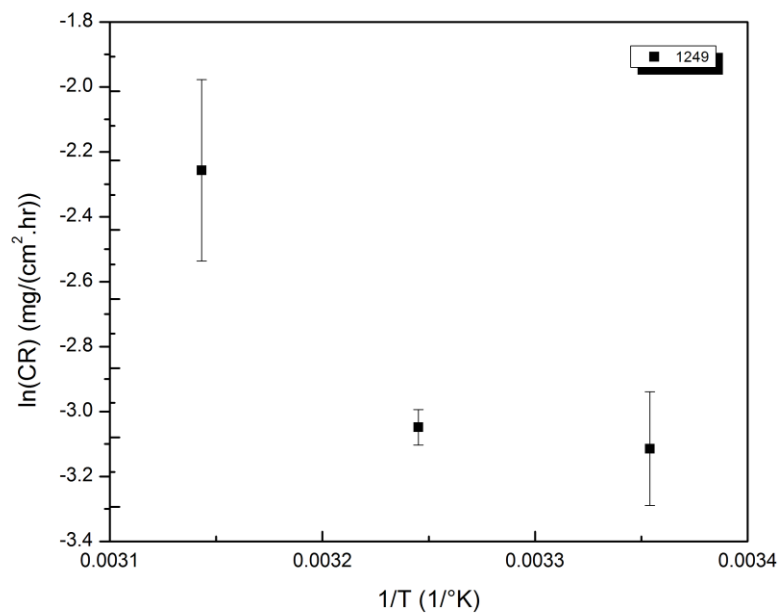


Figure 13- Activation energy for 7 days in 1249 media

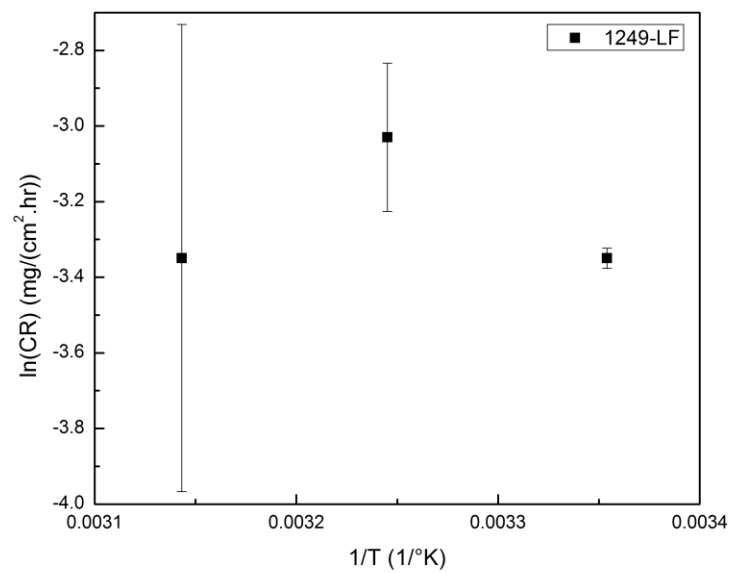


Figure 14- Activation energy for 7 days in 1249-LF media

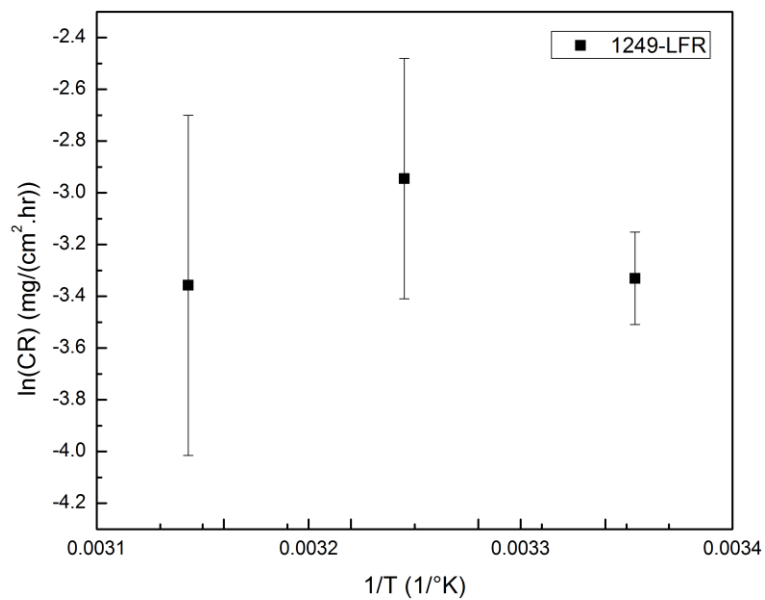


Figure 15- Activation energy for 7 days in 1249-LFR media

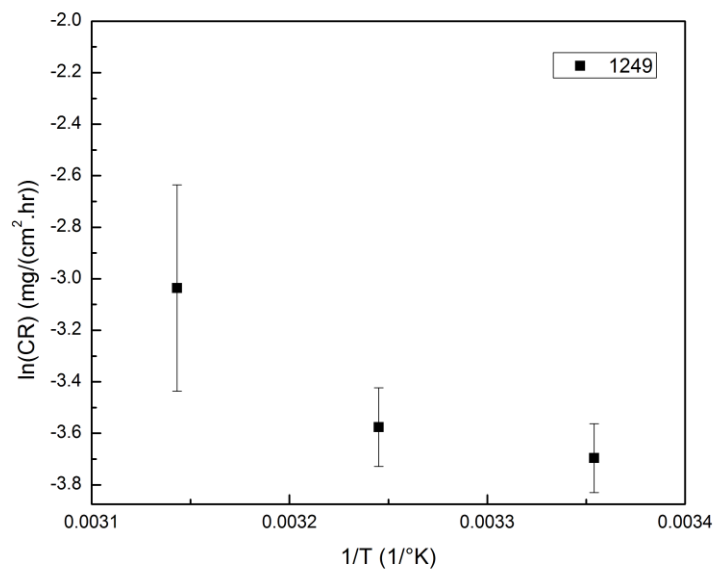


Figure 16- Activation energy for 14 days in 1249 media

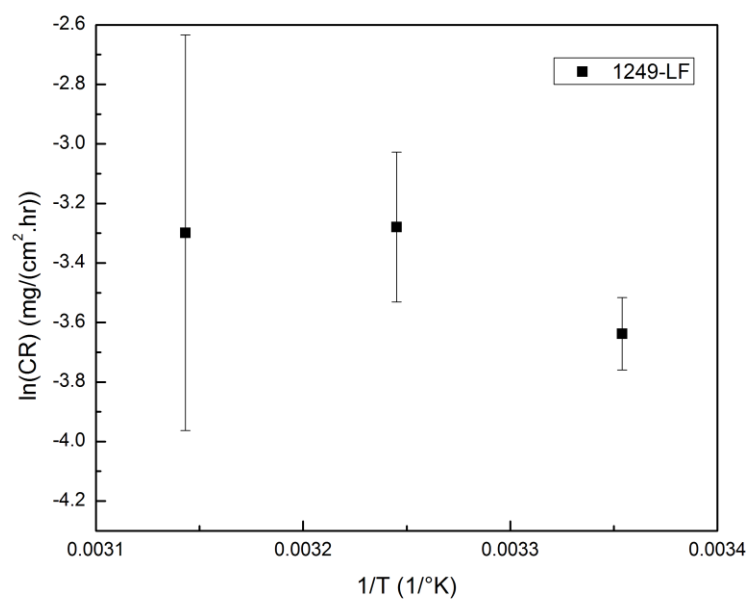


Figure 17- Activation energy for 14 days in 1249-LF media

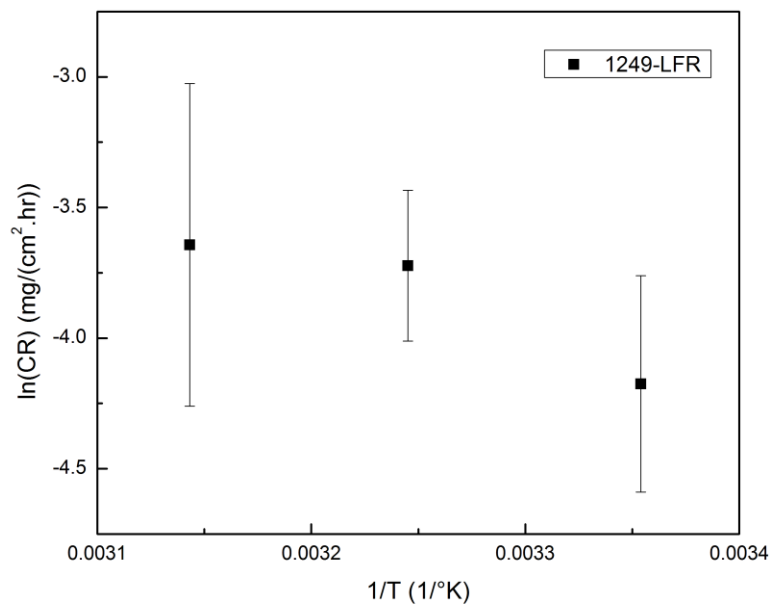


Figure 18- Activation energy for 14 days in 1249-LFR media

Appendix 4a

Potentiodynamic curves for *D. vulgaris*

(In the following graphs vertical axis is log (current) in A, and horizontal axis is potential in V vs. Ag/AgCl reference electrode)

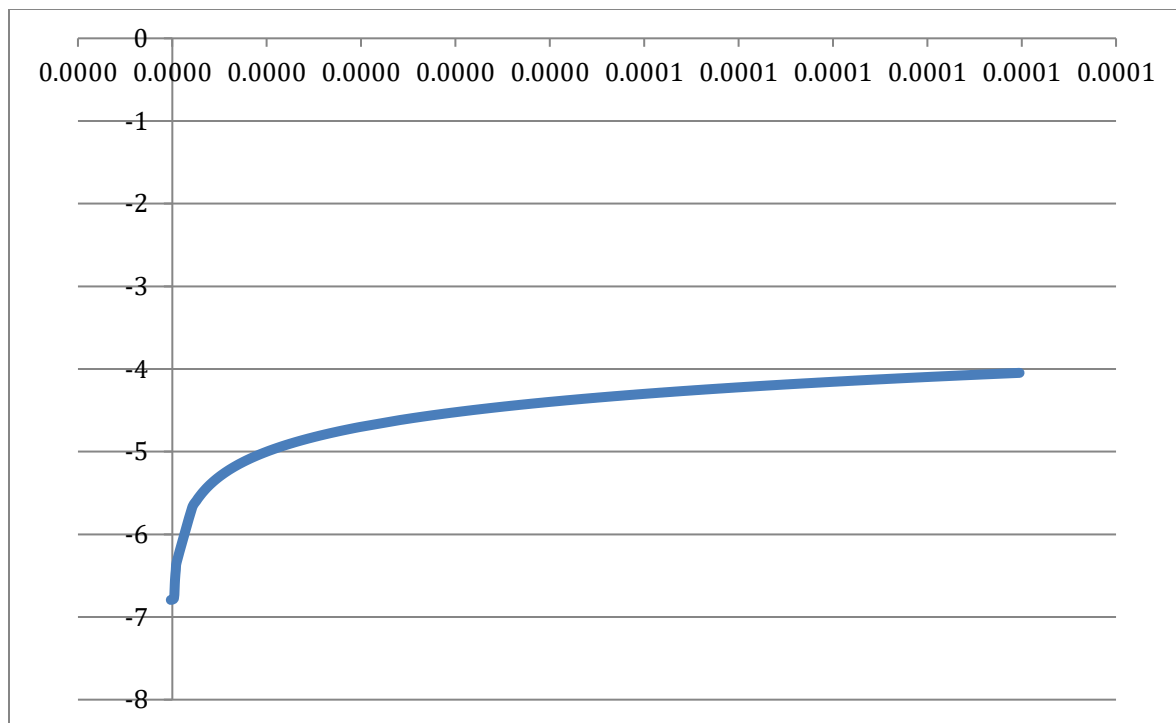


Figure 19- Potentiodynamic curve for *D. vulgaris*-Day 1

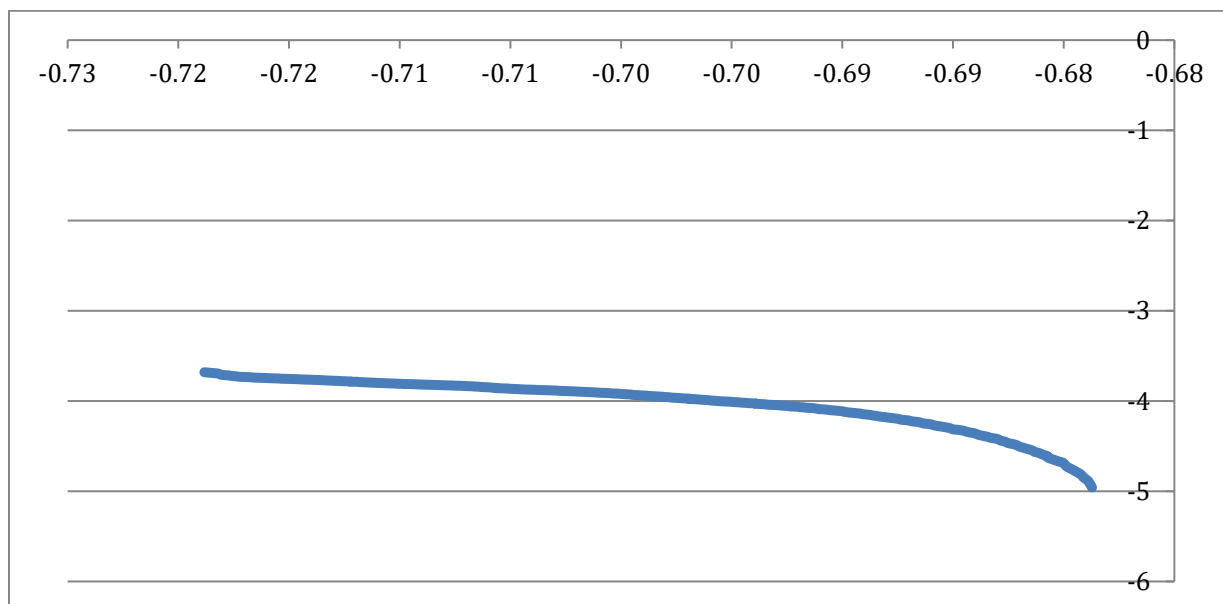


Figure 20- Potentiodynamic curve for *D. vulgaris*-Day 2

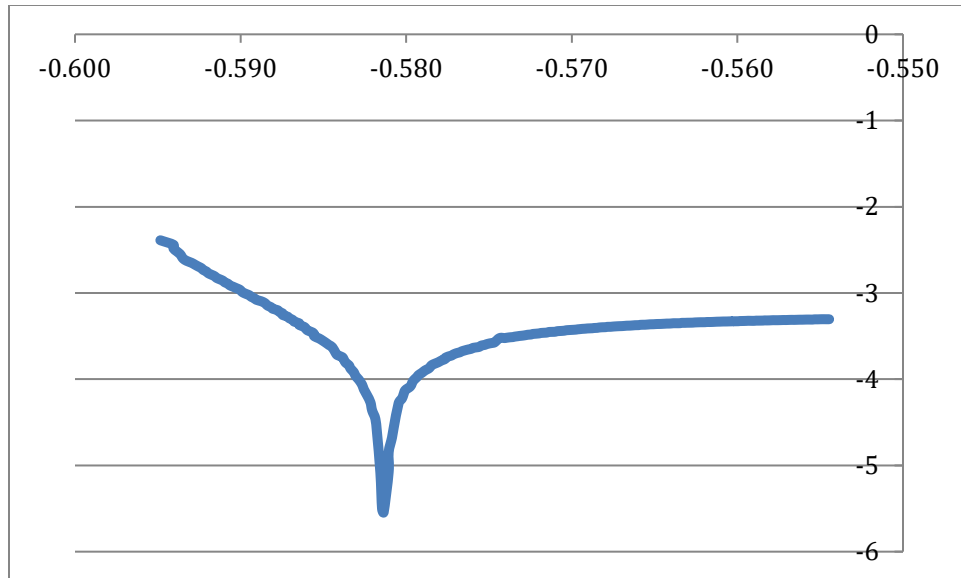


Figure 21- Potentiodynamic curve for *D. vulgaris*-Day 3

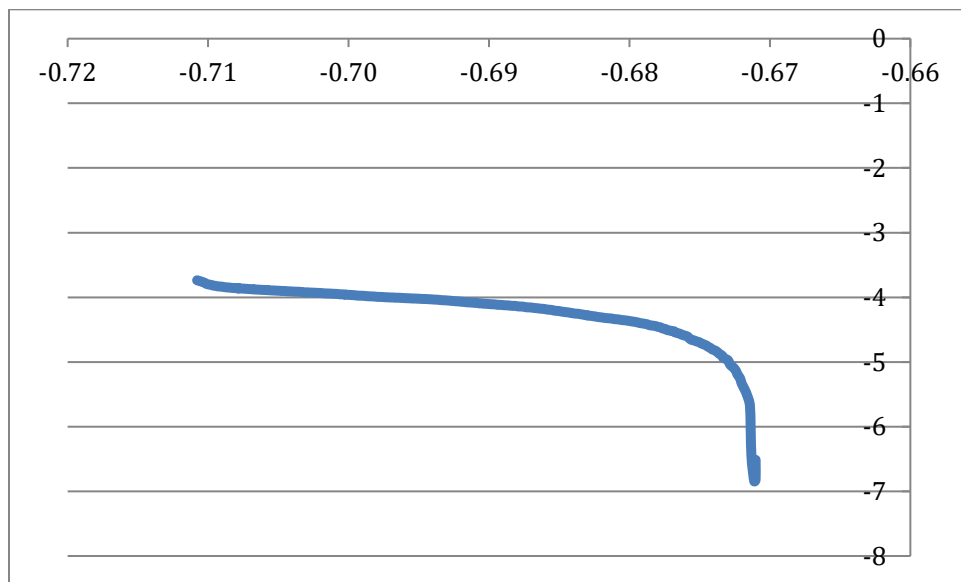


Figure 22- Potentiodynamic curve for *D. vulgaris*-Day 4

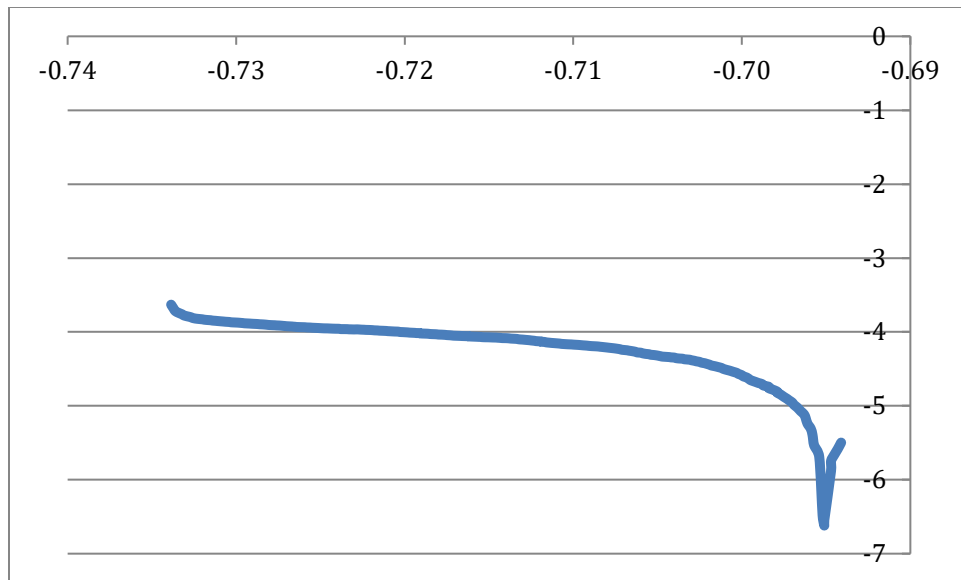


Figure 23- Potentiodynamic curve for *D. vulgaris*-Day 5

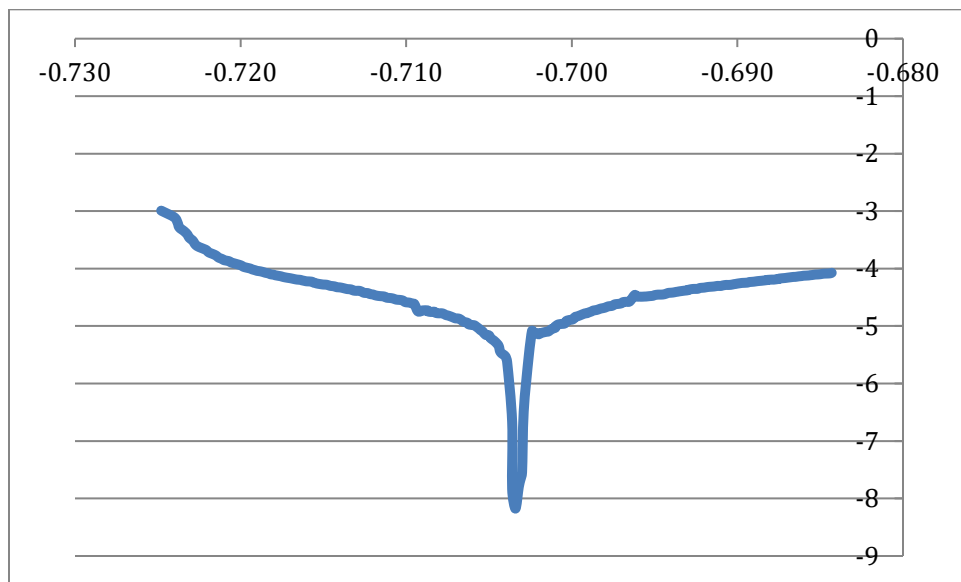


Figure 24- Potentiodynamic curve for *D. vulgaris*-Day 8

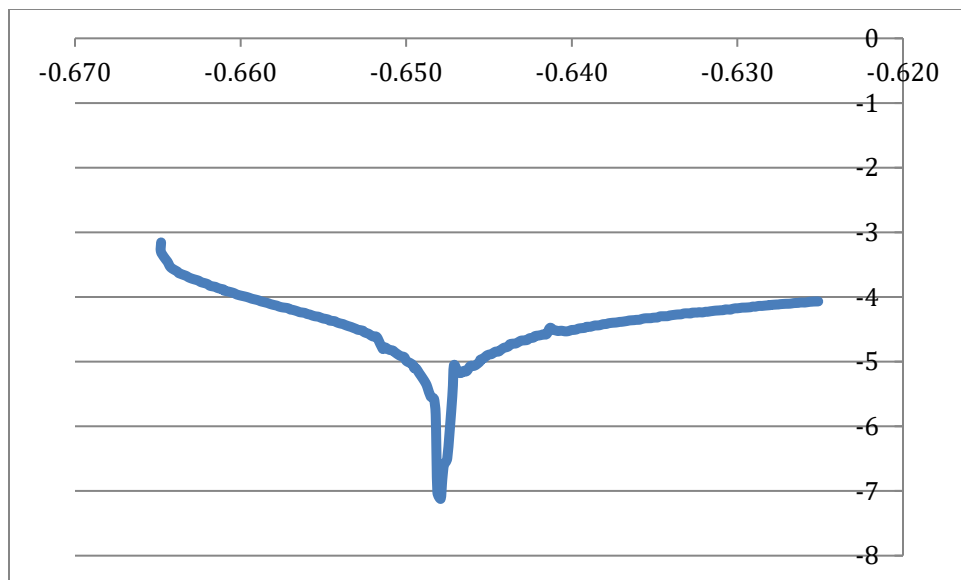


Figure 25- Potentiodynamic curve for *D. vulgaris*-Day 9

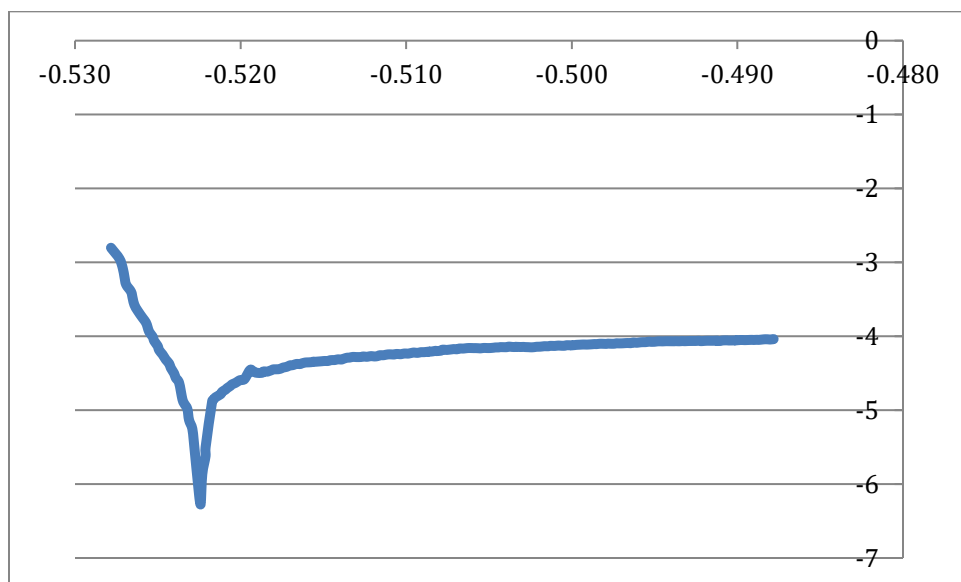


Figure 26- Potentiodynamic curve for *D. vulgaris*-Day 12

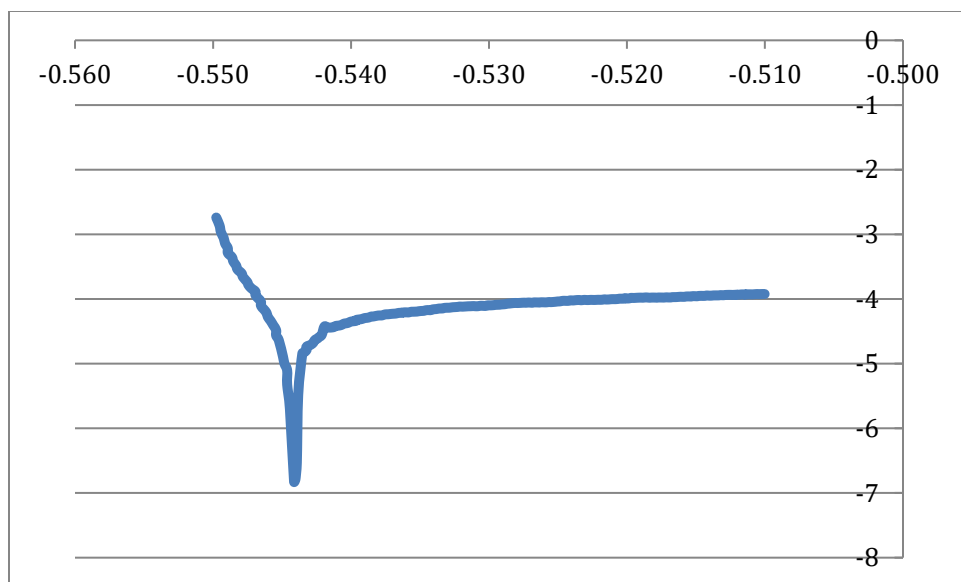


Figure 27- Potentiodynamic curve for *D. vulgaris*-Day 13

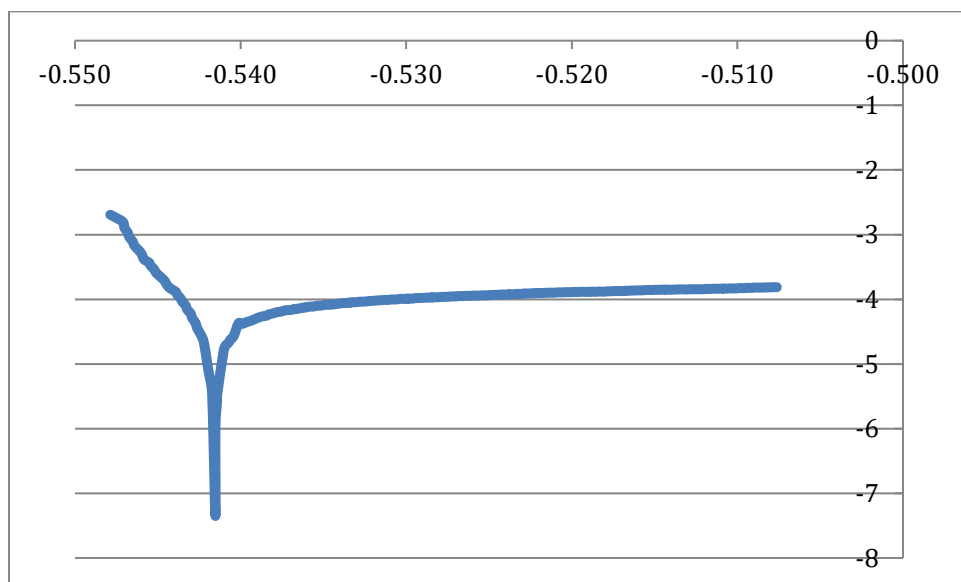


Figure 28- Potentiodynamic curve for *D. vulgaris*-Day 14

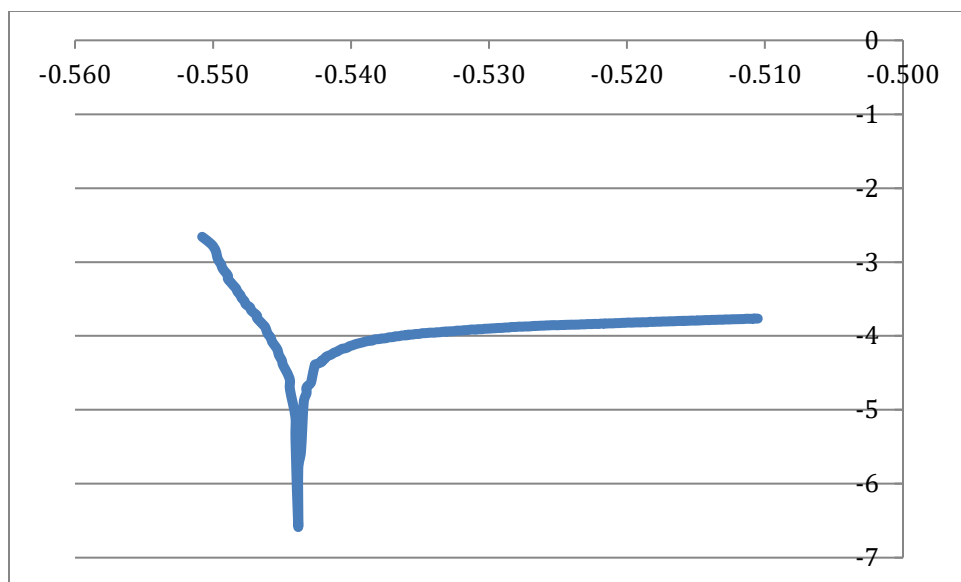


Figure 29- Potentiodynamic curve for *D. vulgaris*-Day 15

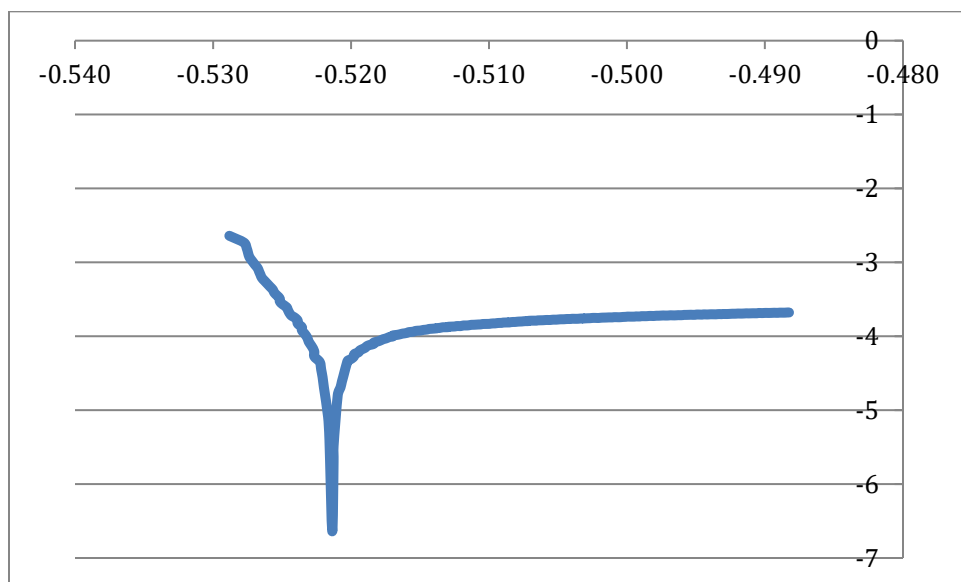


Figure 30- Potentiodynamic curve for *D. vulgaris*-Day 16

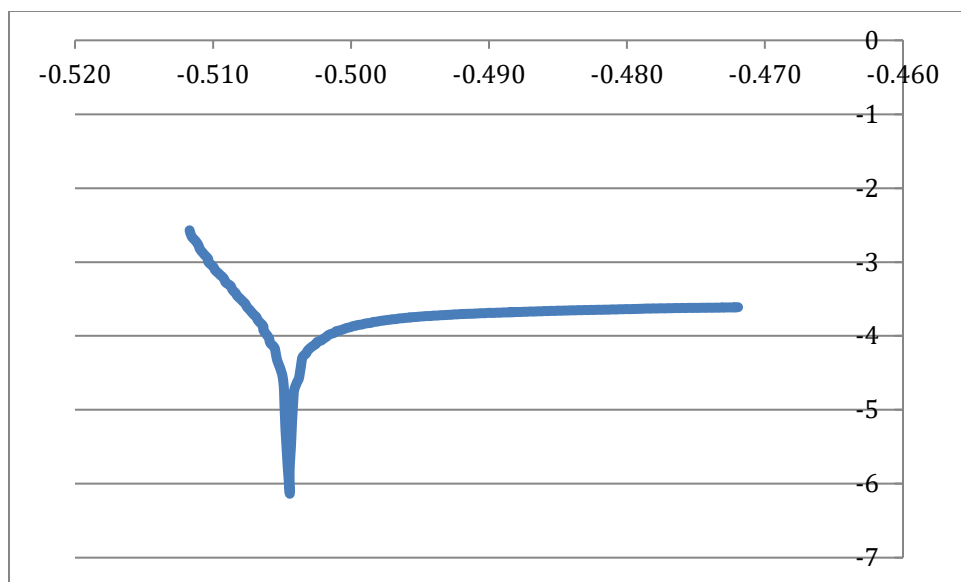


Figure 31- Potentiodynamic curve for *D. vulgaris*-Day 19

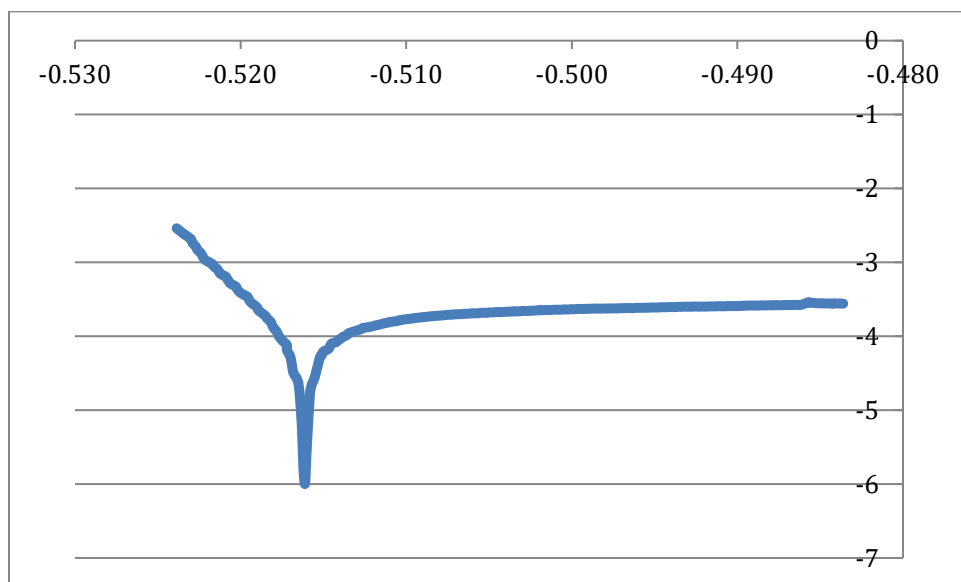


Figure 32- Potentiodynamic curve for *D. vulgaris*-Day 20

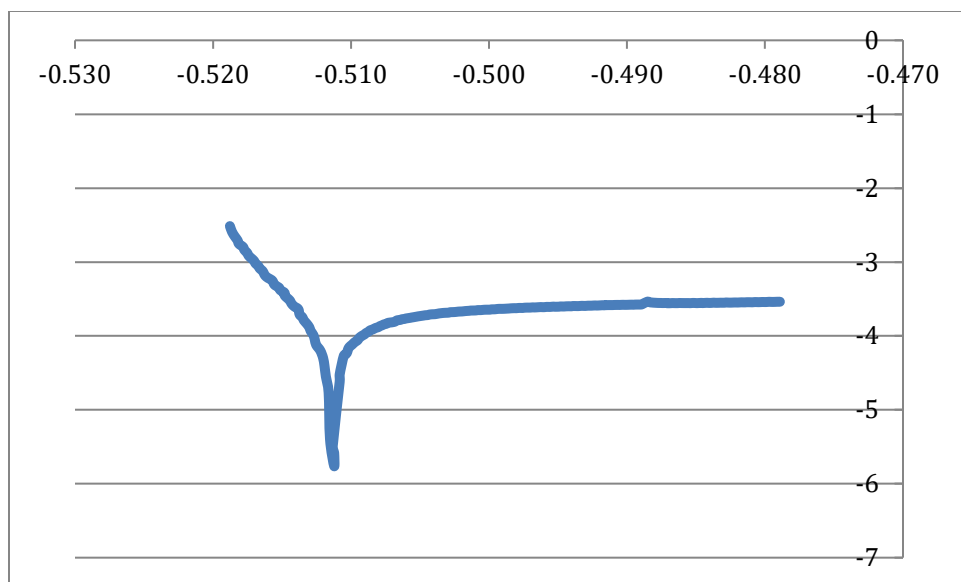


Figure 33- Potentiodynamic curve for *D. vulgaris*-Day 21

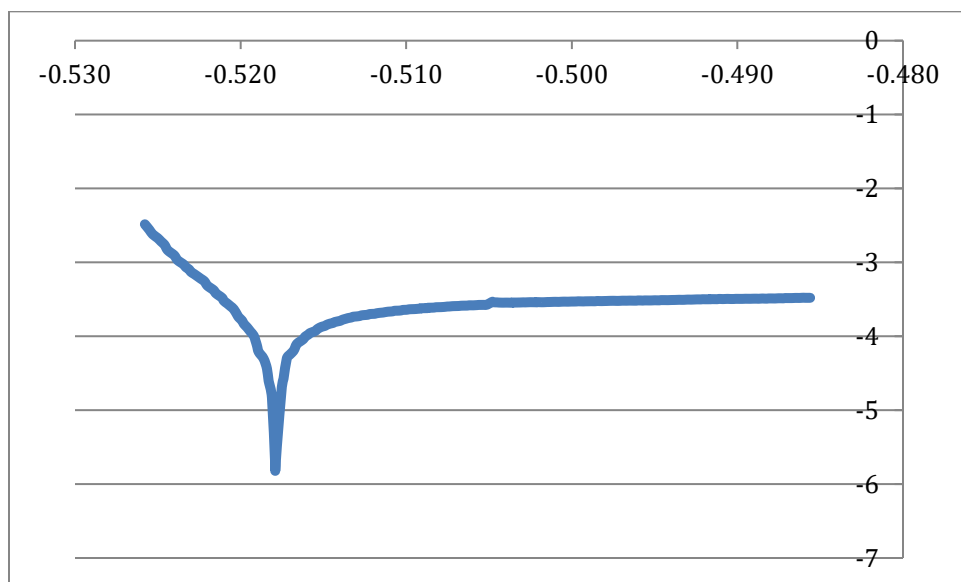


Figure 34- Potentiodynamic curve for *D. vulgaris*-Day 22

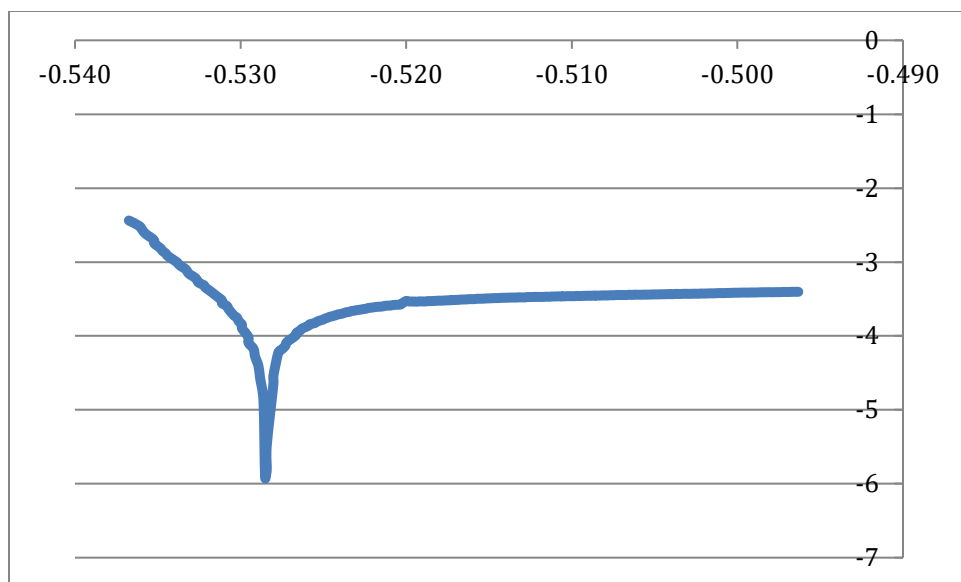


Figure 35- Potentiodynamic curve for *D. vulgaris*-Day 23

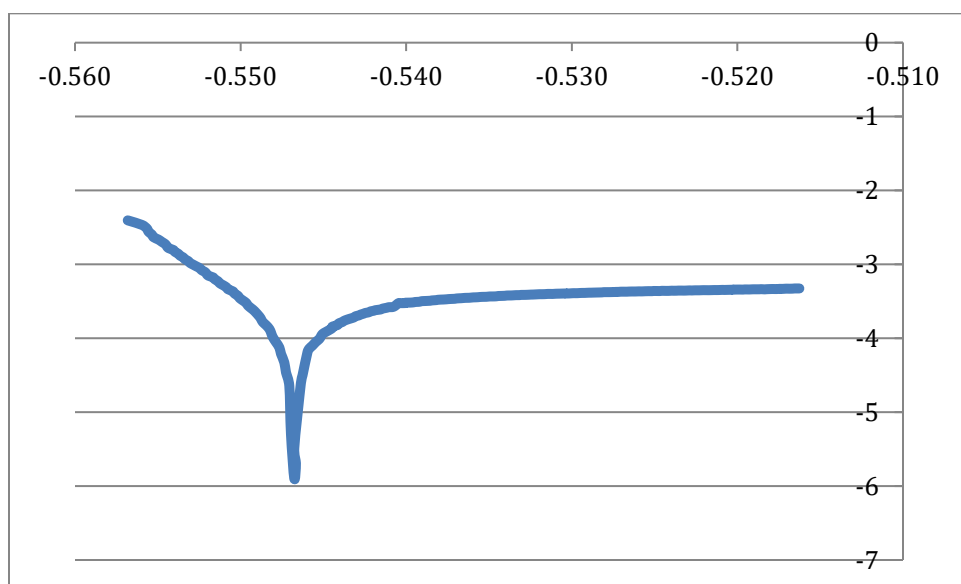


Figure 36- Potentiodynamic curve for *D. vulgaris*-Day 26

Appendix 4b

Polarization resistance curves for *D. vulgaris*

(In the following graphs vertical axis is current (I) in A, and horizontal axis is potential in V vs. Ag/AgCl reference electrode)

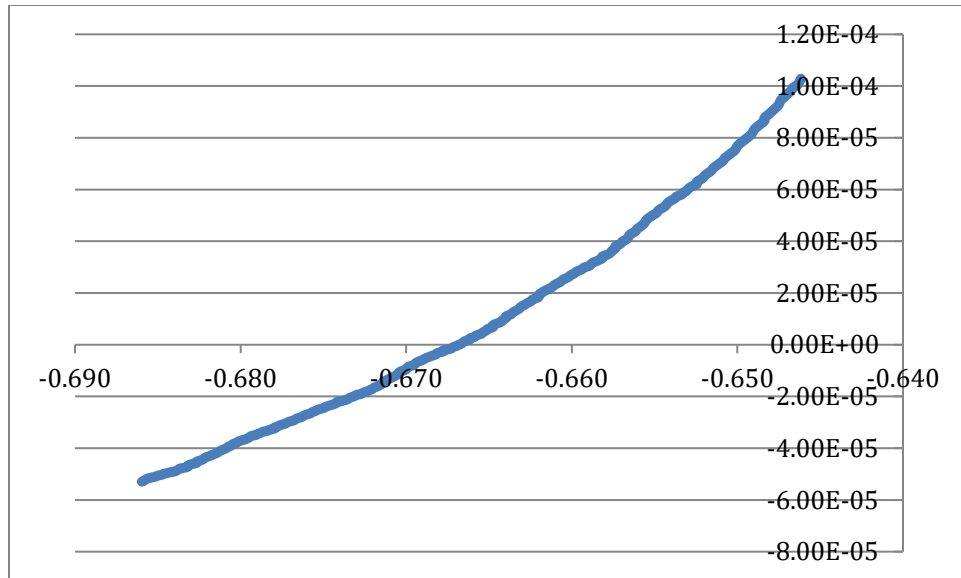


Figure 37 -Polarization resistance curve for *D. vulgaris*-day 1

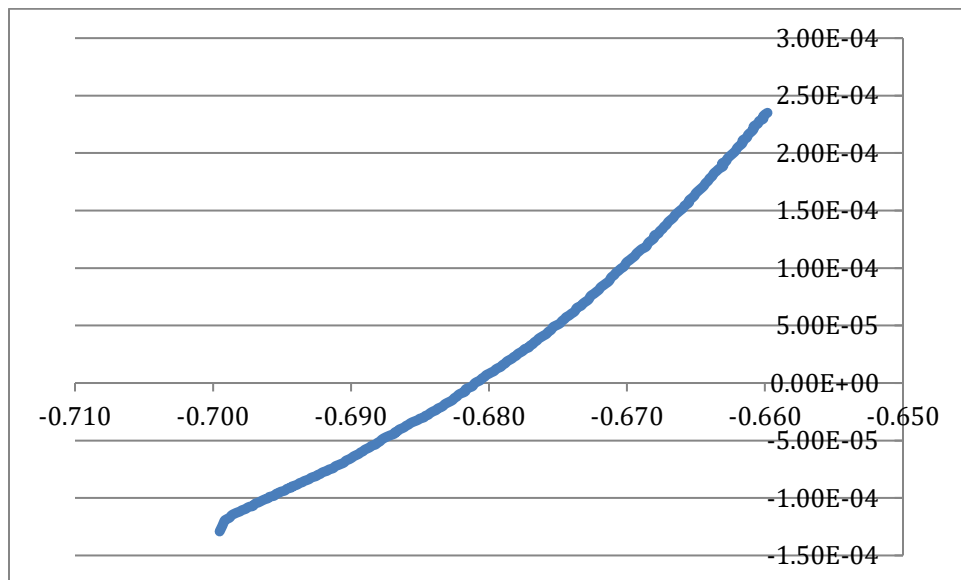


Figure 38 -Polarization resistance curve for *D. vulgaris*-day 2

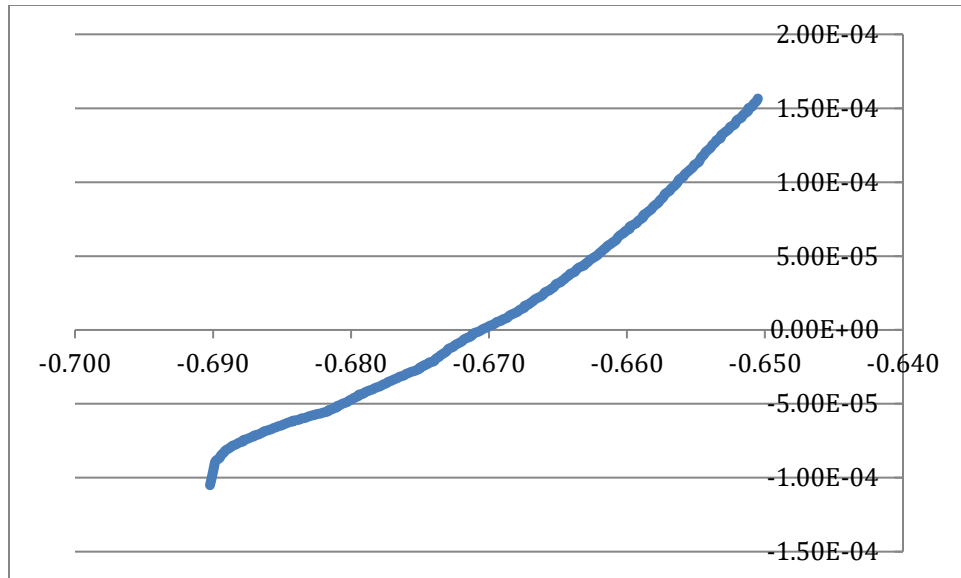


Figure 39 -Polarization resistance curve for *D. vulgaris*-day 4

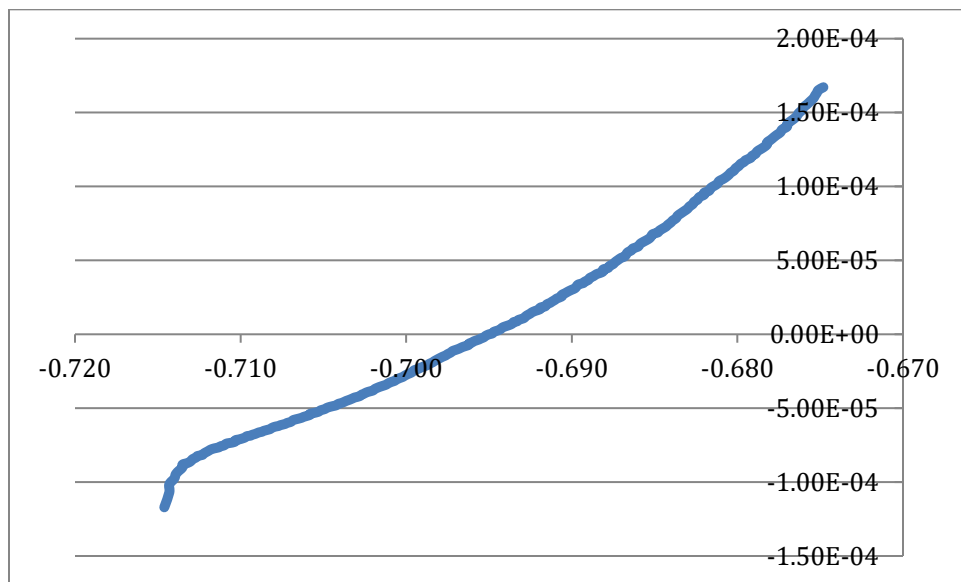


Figure 40 -Polarization resistance curve for *D. vulgaris*-day 5

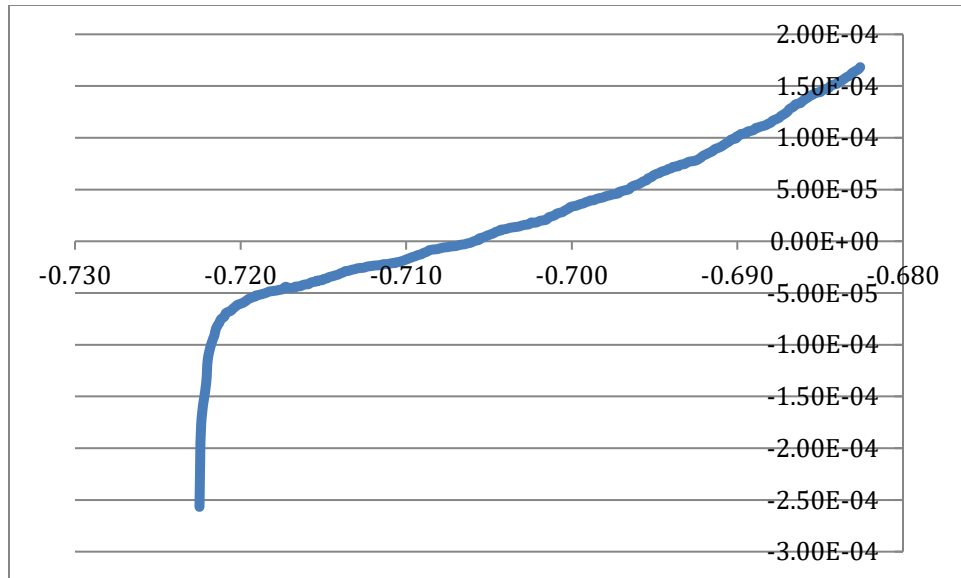


Figure 41 -Polarization resistance curve for *D. vulgaris*-day 6

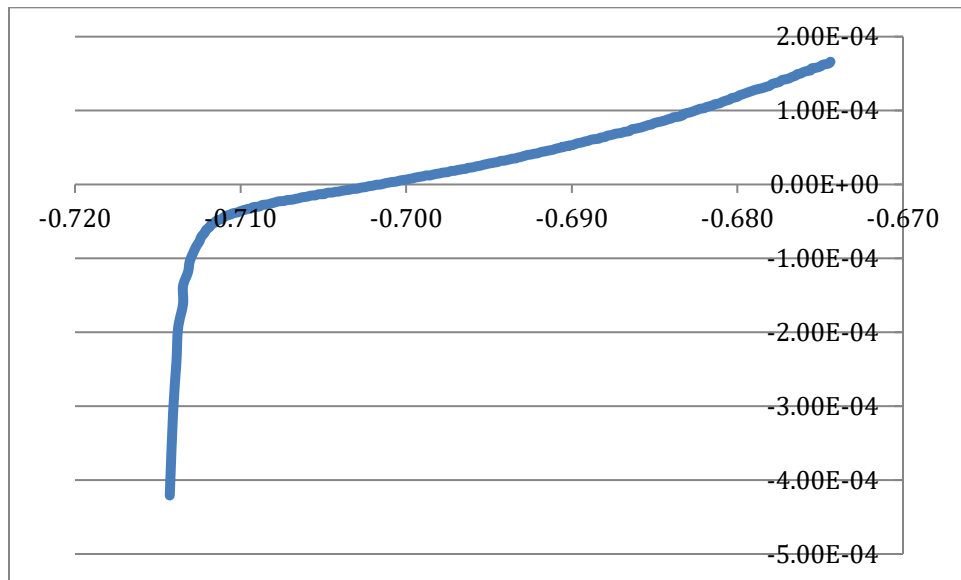


Figure 42 -Polarization resistance curve for *D. vulgaris*-day 7

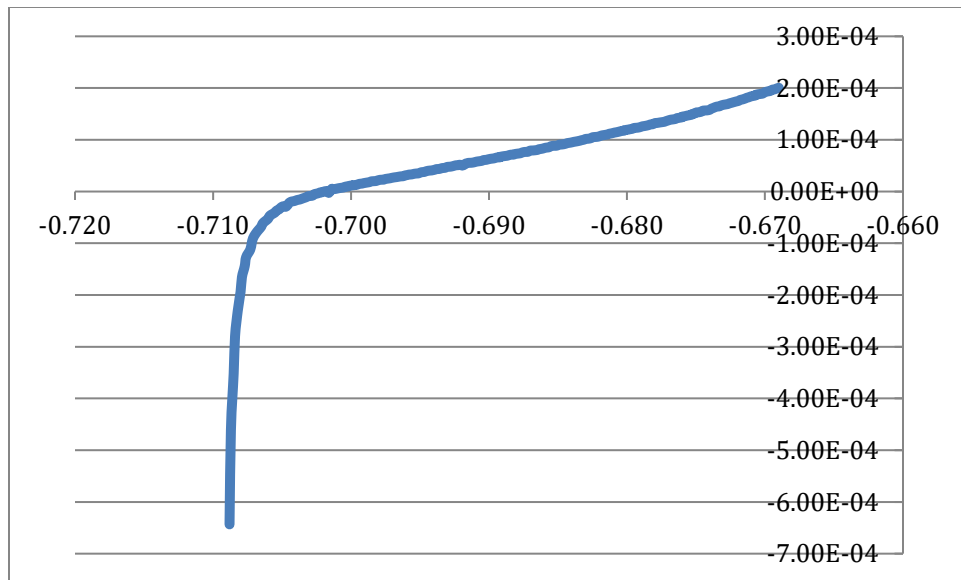


Figure 43 -Polarization resistance curve for *D. vulgaris*-day 8

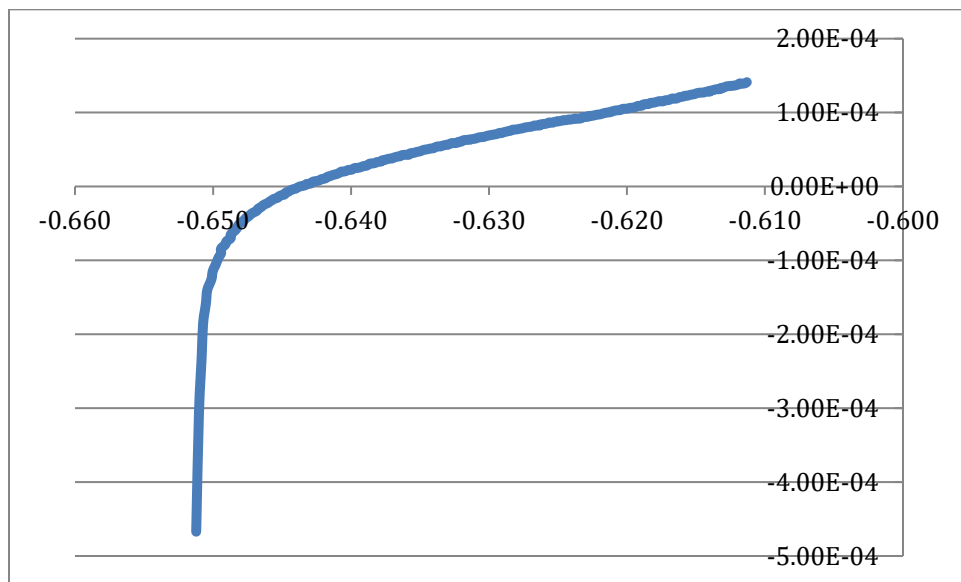


Figure 44 -Polarization resistance curve for *D. vulgaris*-day 9

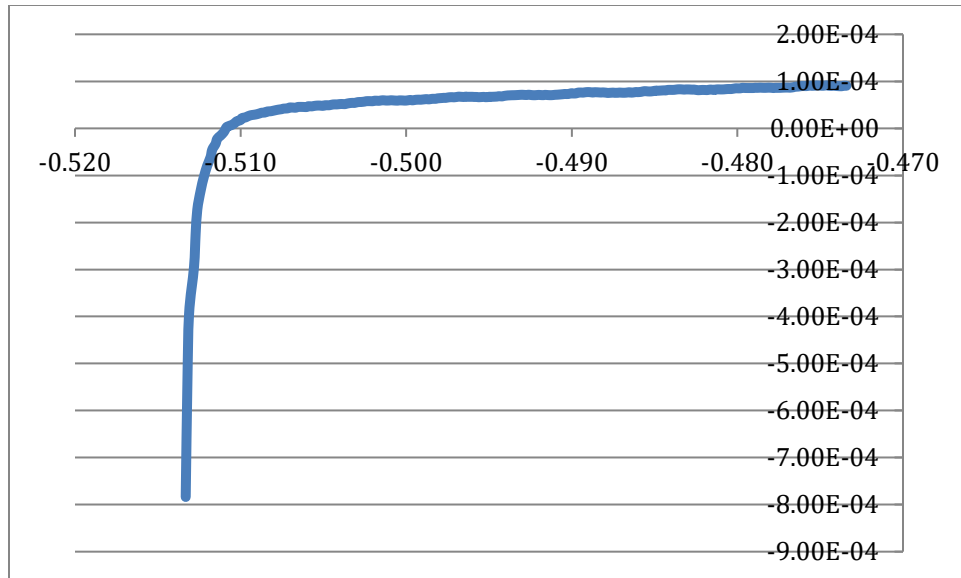


Figure 45 -Polarization resistance curve for *D. vulgaris*-day 12

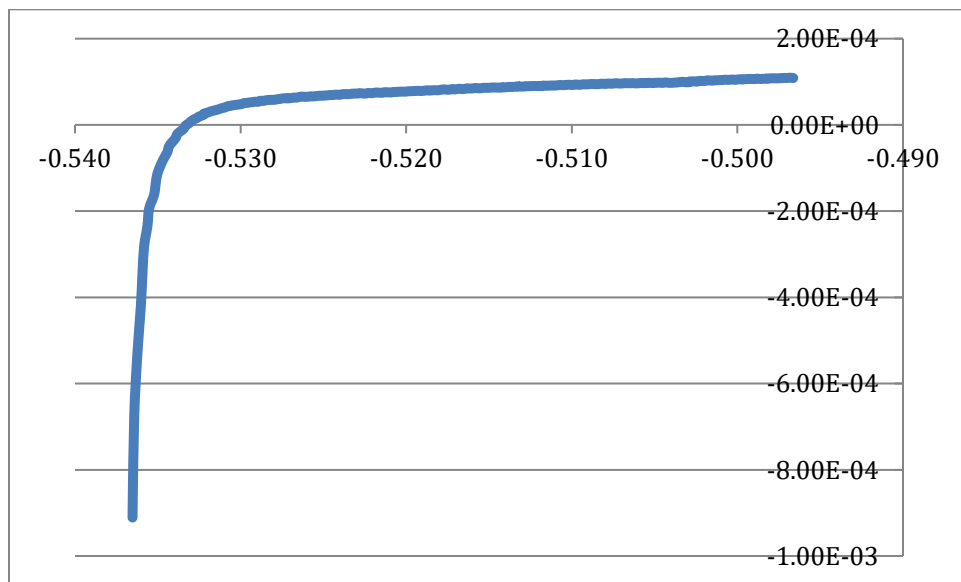


Figure 46 -Polarization resistance curve for *D. vulgaris*-day 13

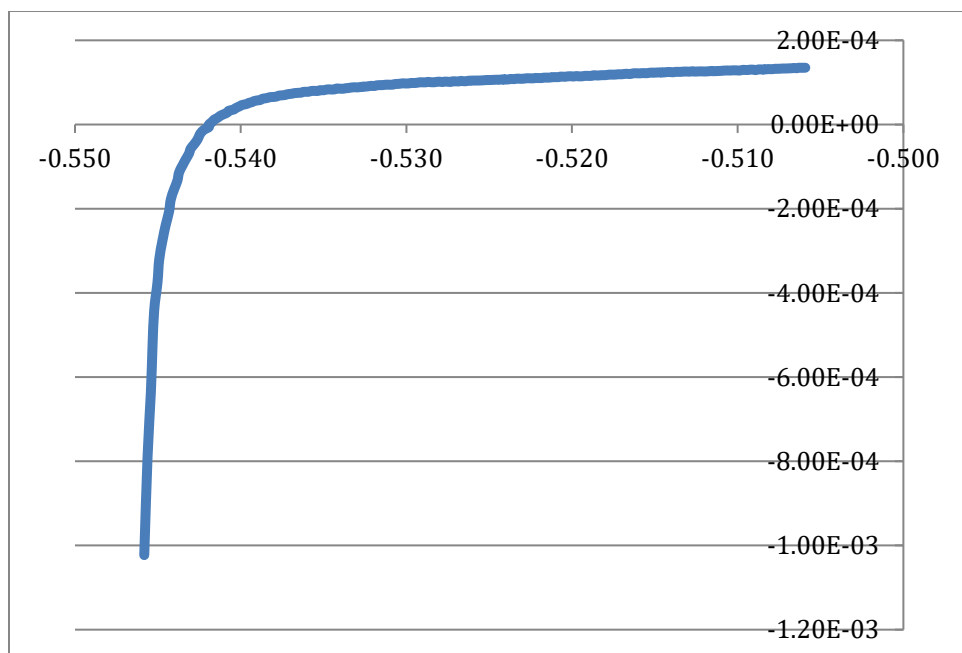


Figure 47 -Polarization resistance curve for *D. vulgaris*-day 14

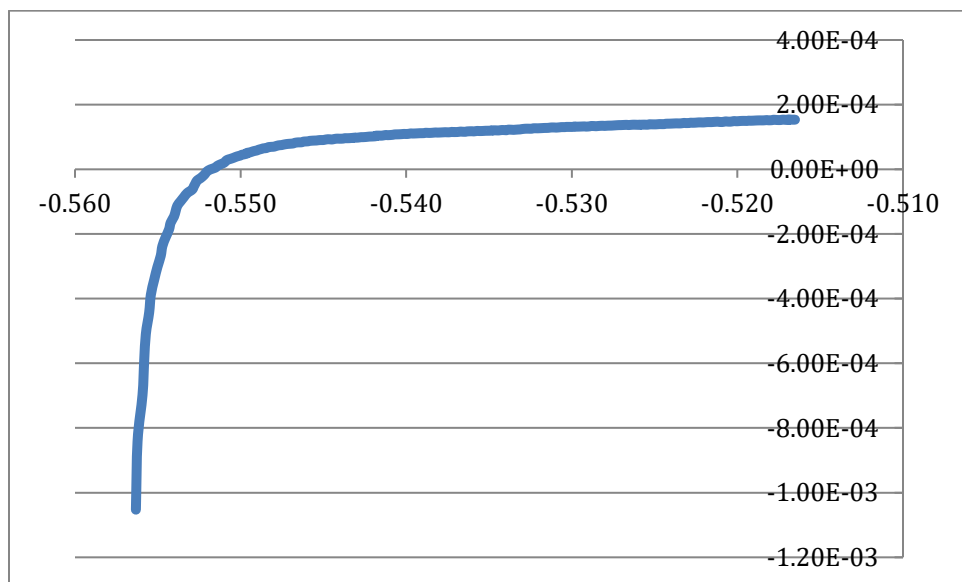


Figure 48 -Polarization resistance curve for *D. vulgaris*-day 15

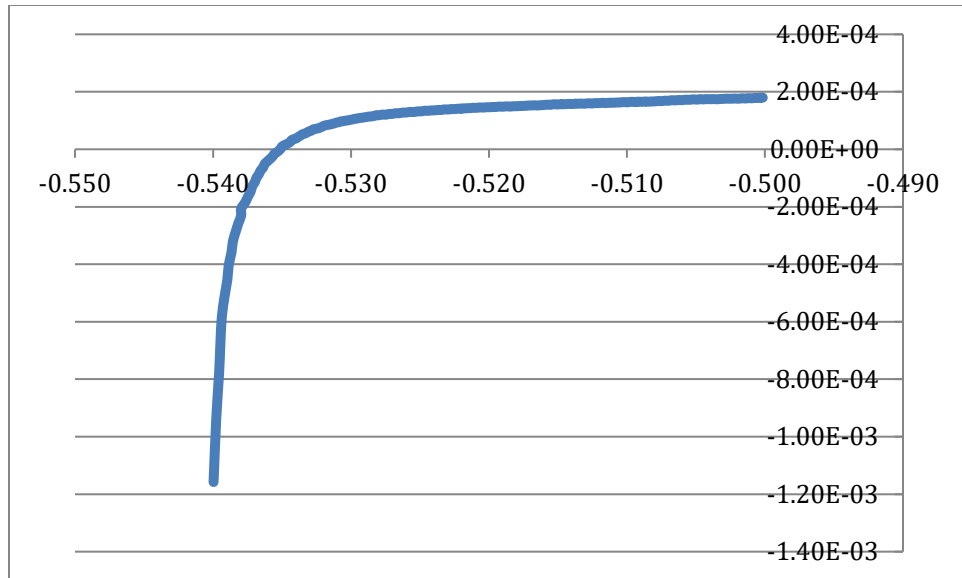


Figure 49 -Polarization resistance curve for *D. vulgaris*-day 16

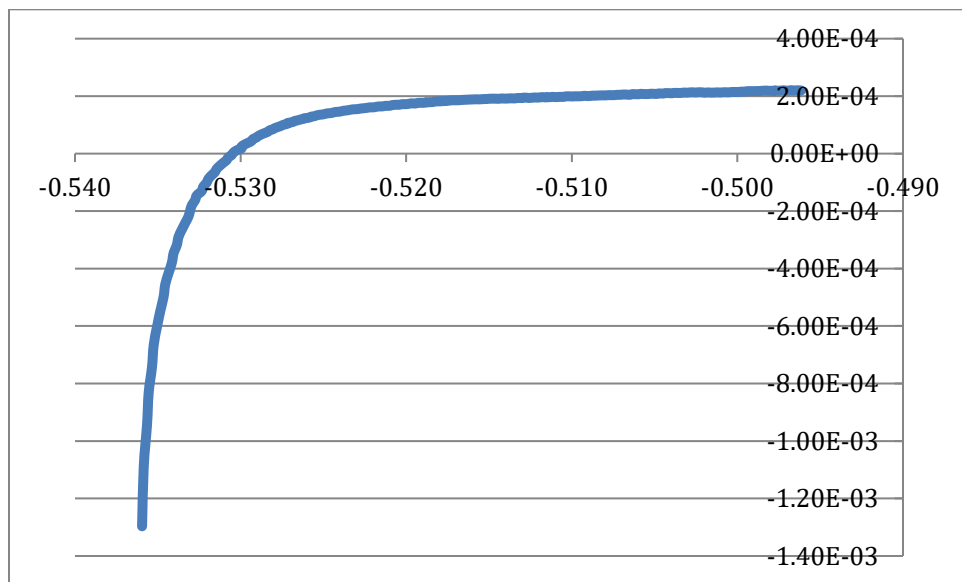


Figure 50 -Polarization resistance curve for *D. vulgaris*-day 19

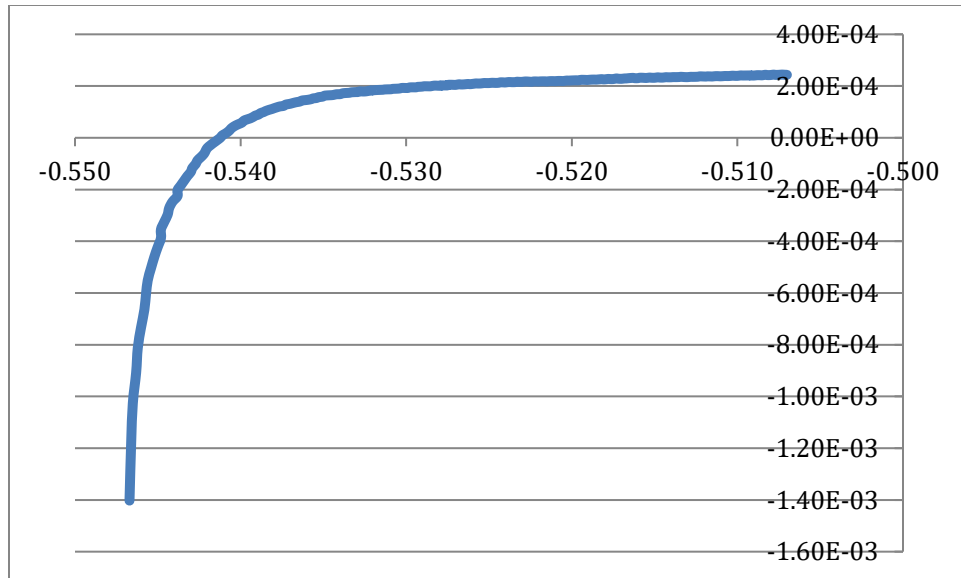


Figure 51 -Polarization resistance curve for *D. vulgaris*-day 20

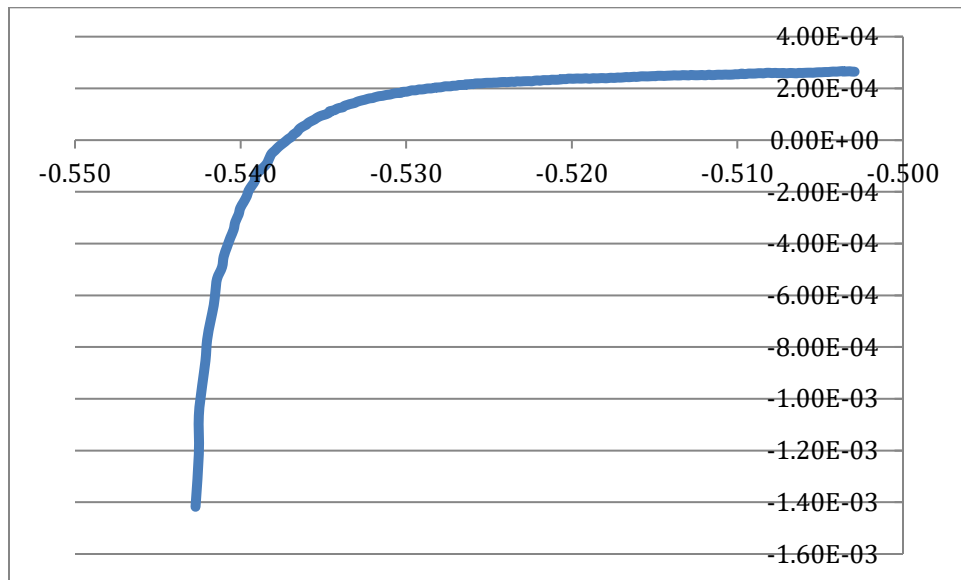


Figure 52 -Polarization resistance curve for *D. vulgaris*-day 21

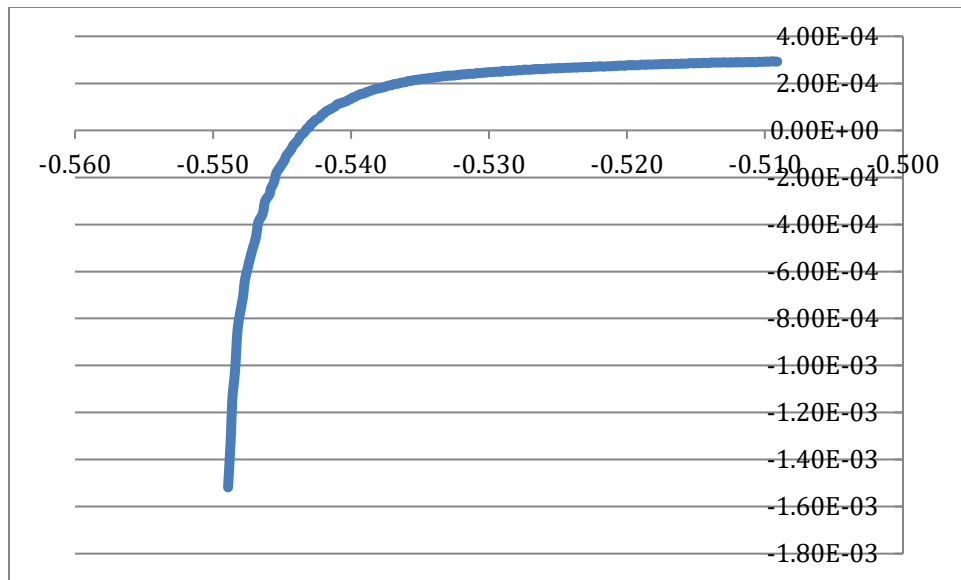


Figure 53 -Polarization resistance curve for *D. vulgaris*-day 22

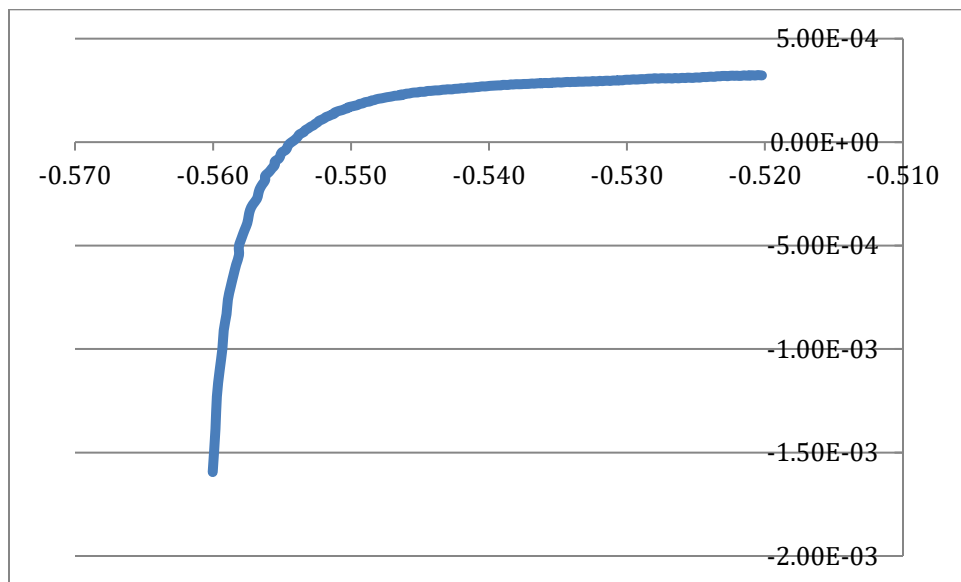


Figure 54 -Polarization resistance curve for *D. vulgaris*-day 23

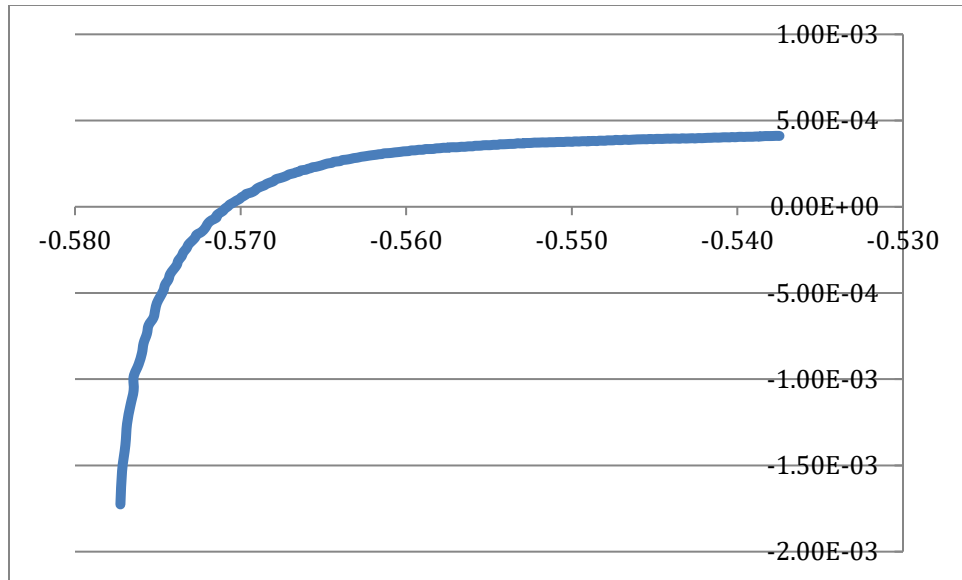


Figure 55 -Polarization resistance curve for *D. vulgaris*-day 26

Appendix 5a

Potentiodynamic curves for *D. bastinii*

(In the following graphs vertical axis is log (current) in A, and horizontal axis is potential in V vs. Ag/AgCl reference electrode)

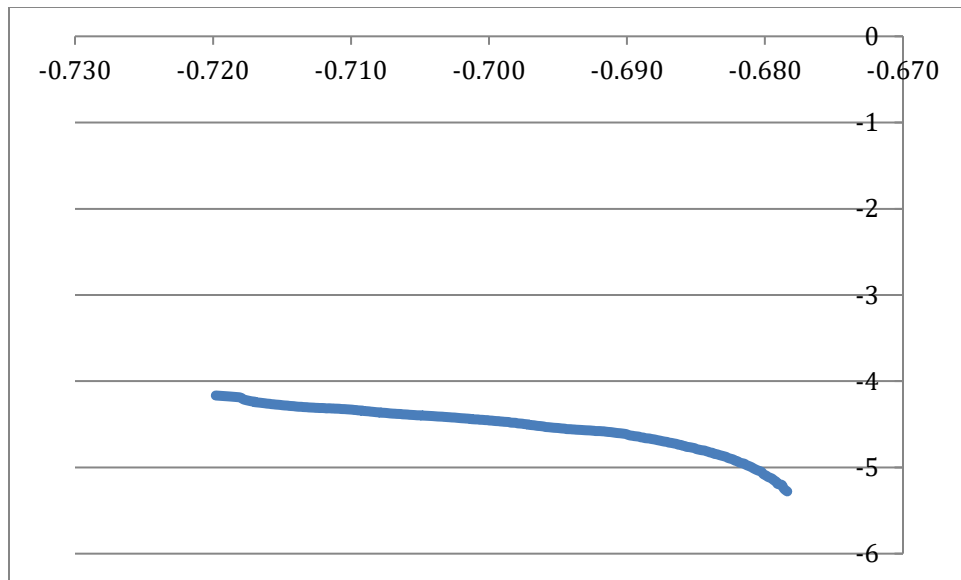


Figure 56 -Potentiodynamic curve for *D. bastinii*-day 1

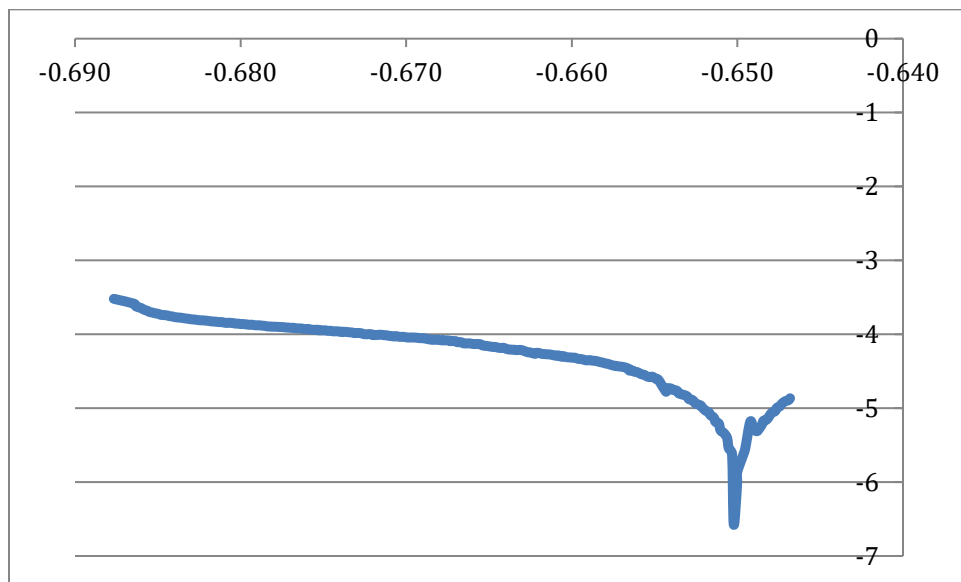


Figure 57 -Potentiodynamic curve for *D. bastinii*-day 2

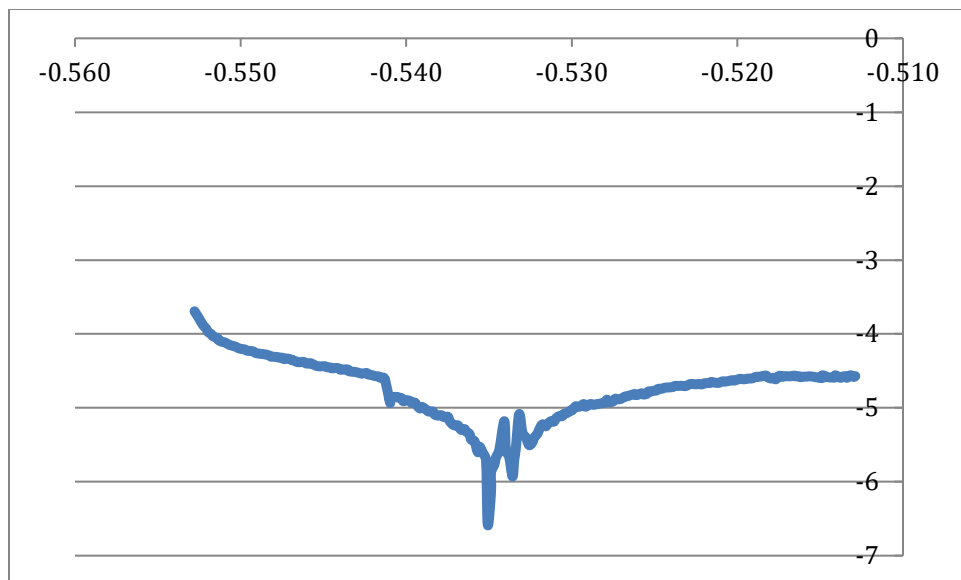


Figure 58 -Potentiodynamic curve for *D. bastinii*-day 3

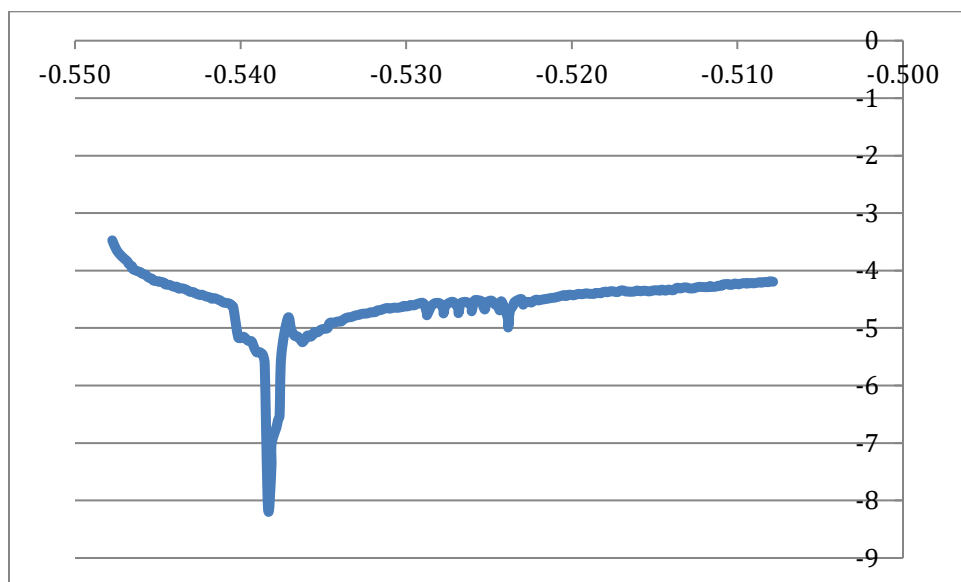


Figure 59 -Potentiodynamic curve for *D. bastinii*-day 4

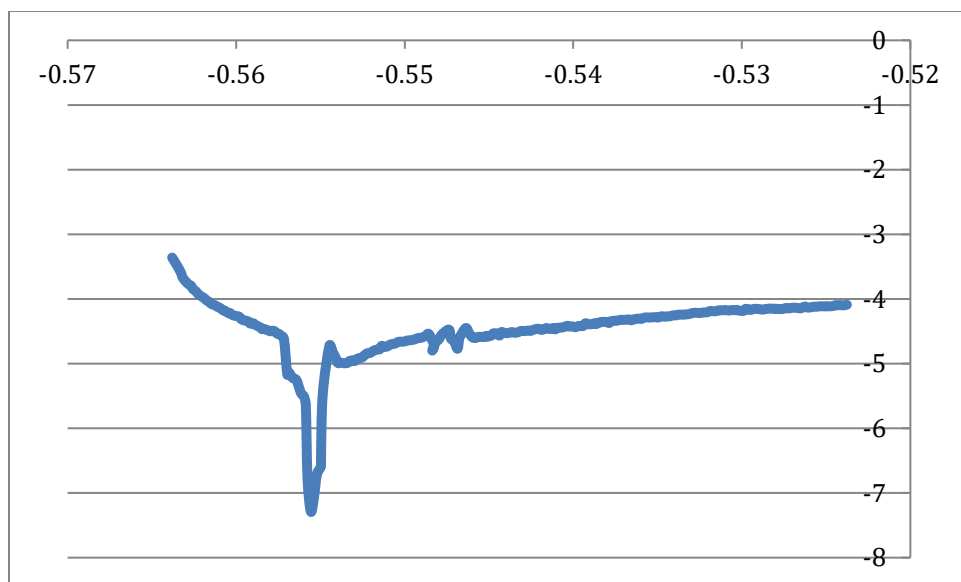


Figure 60 -Potentiodynamic curve for *D. bastinii*-day 5

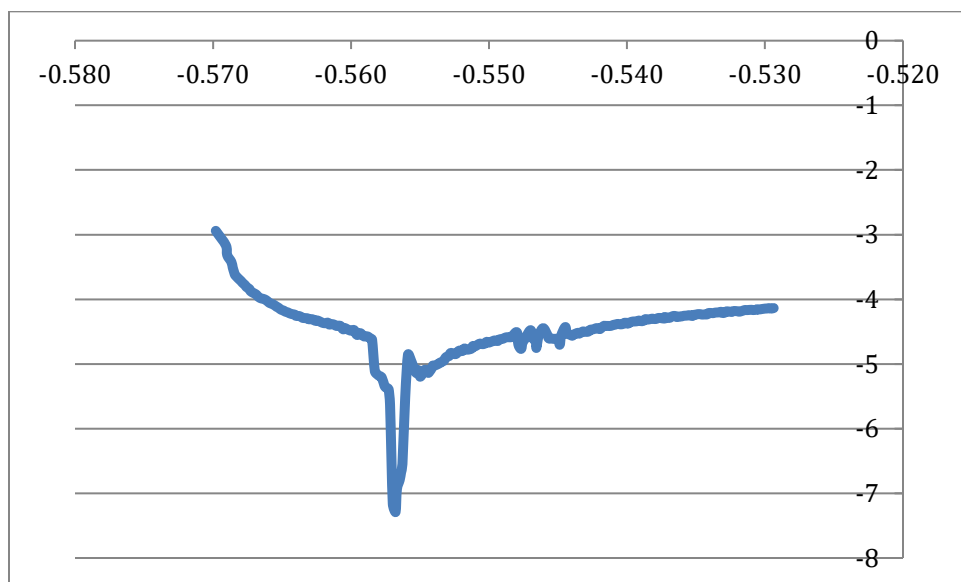


Figure 61 -Potentiodynamic curve for *D. bastinii*-day 6

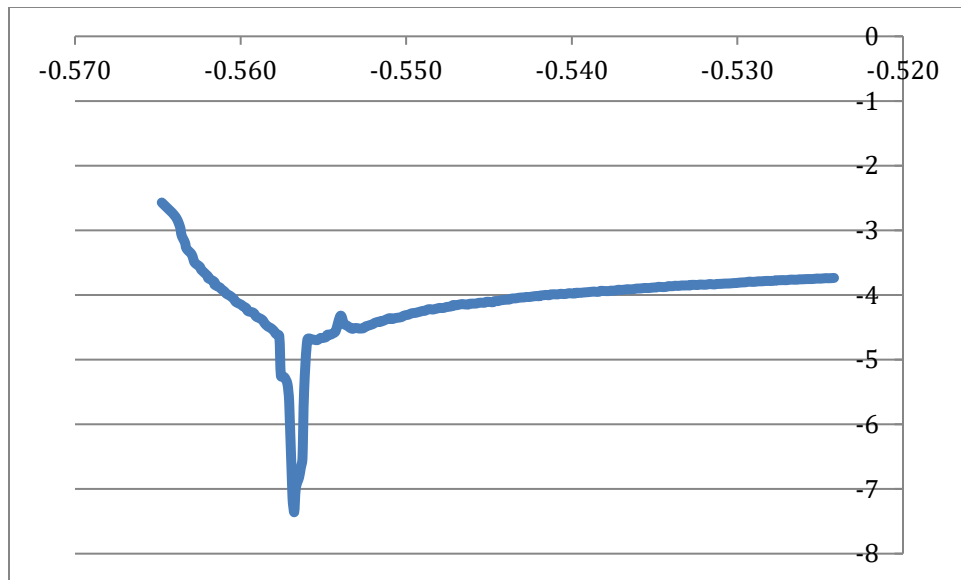


Figure 62 -Potentiodynamic curves for *D. bastinii*-day 7

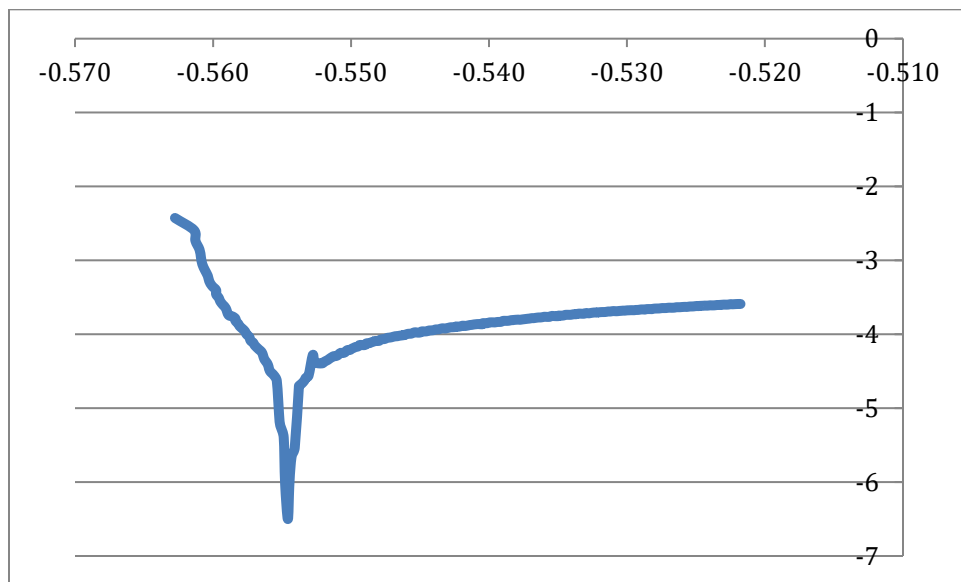


Figure 63 -Potentiodynamic curve for *D. bastinii*-day 8

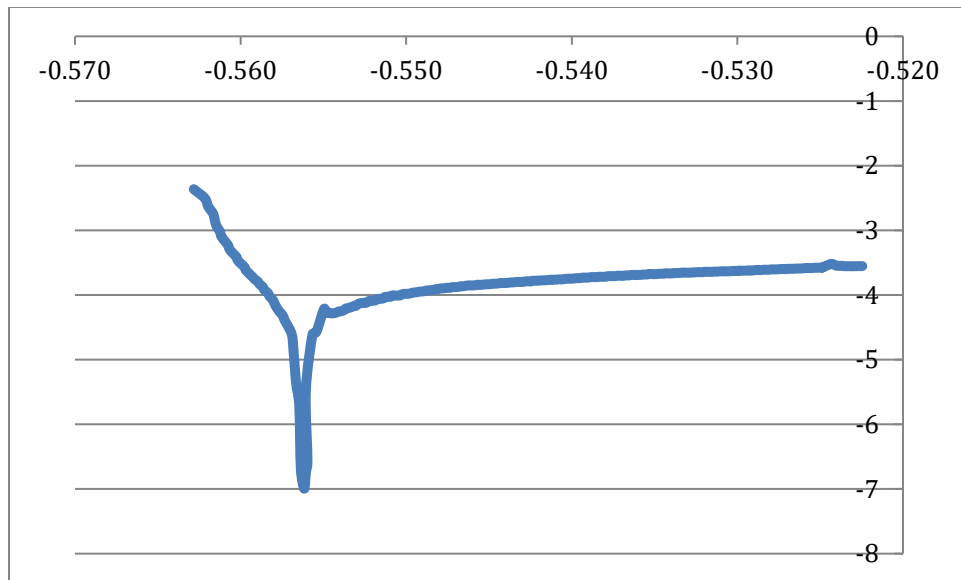


Figure 64 -Potentiodynamic curve for *D. bastinii*-day 9

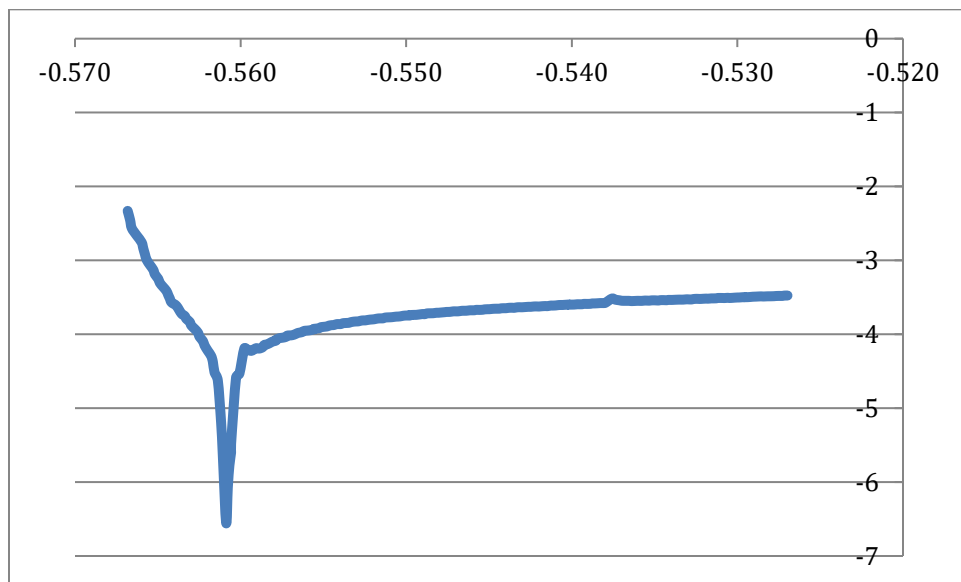


Figure 65 -Potentiodynamic curve for *D. bastinii*-day 10

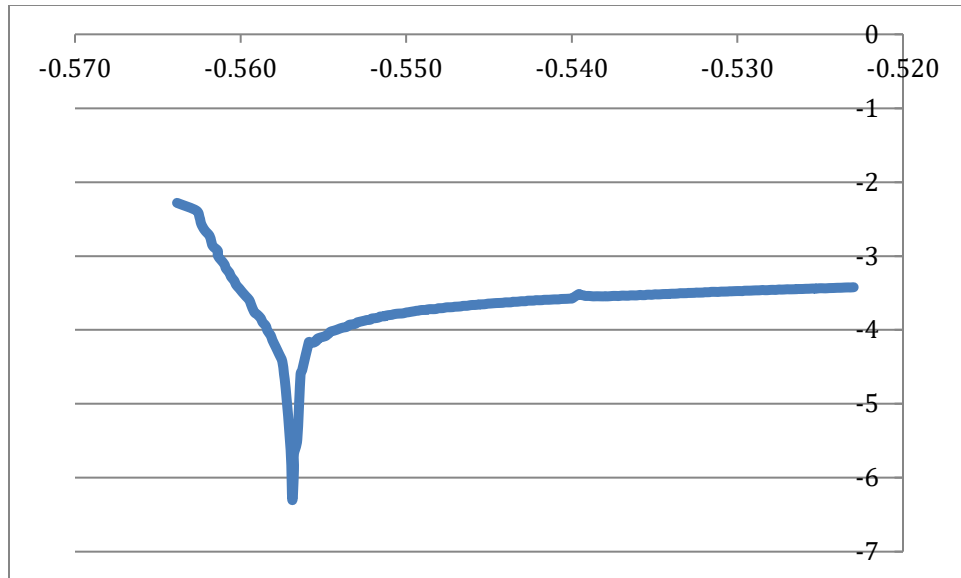


Figure 66 -Potentiodynamic curve for *D. bastinii*-day 11

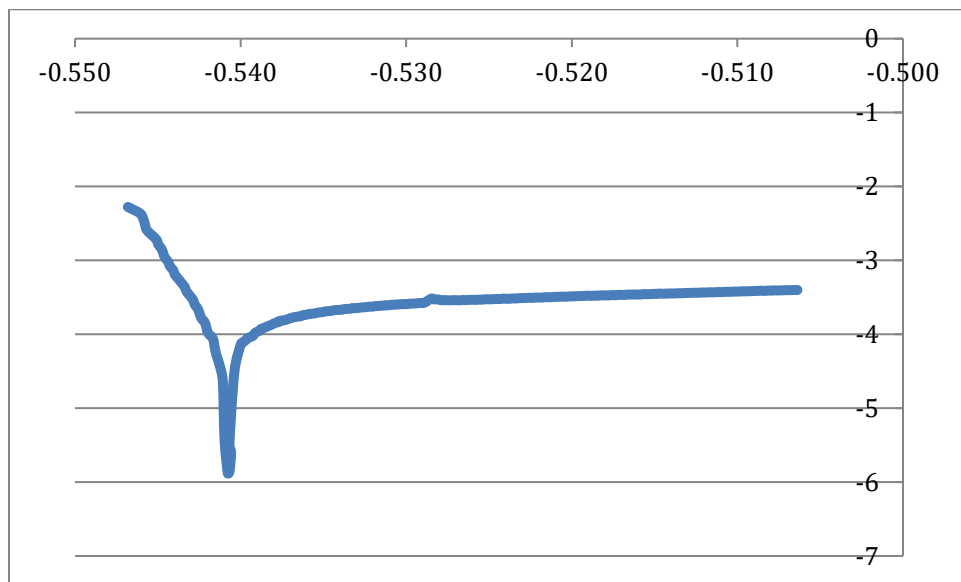


Figure 67 -Potentiodynamic curve for *D. bastinii*-day 12

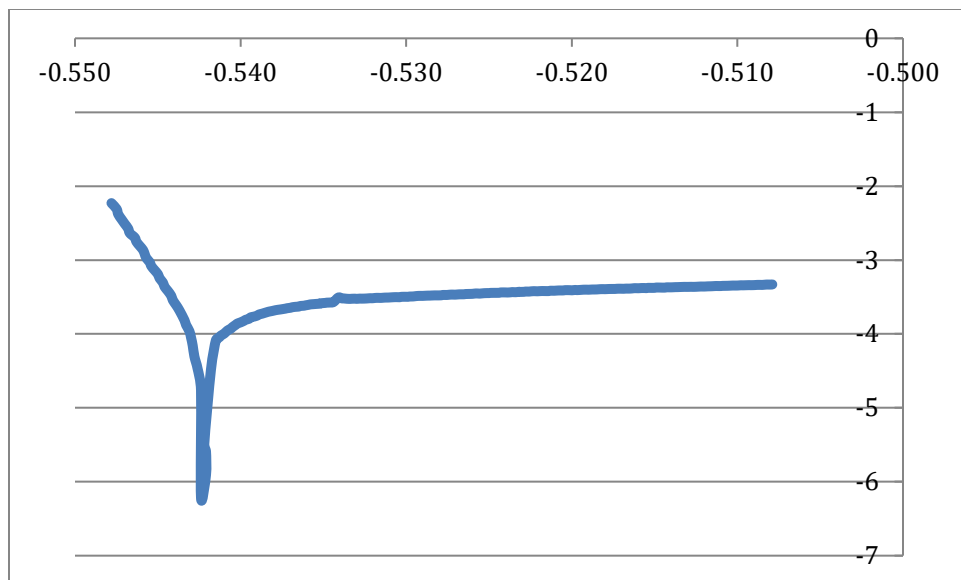


Figure 68 -Potentiodynamic curve for *D. bastinii*-day 13

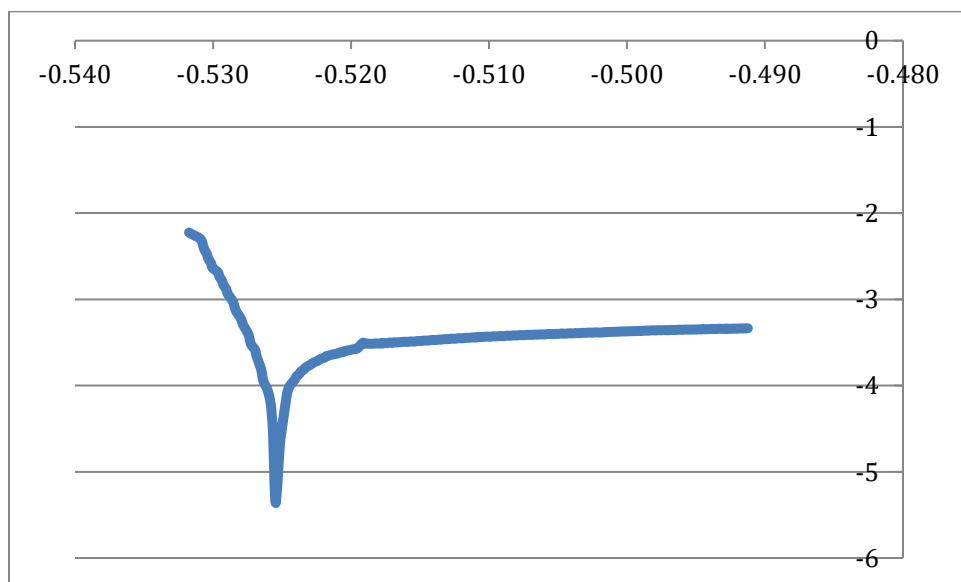


Figure 69 -Potentiodynamic curve for *D. bastinii*-day 14

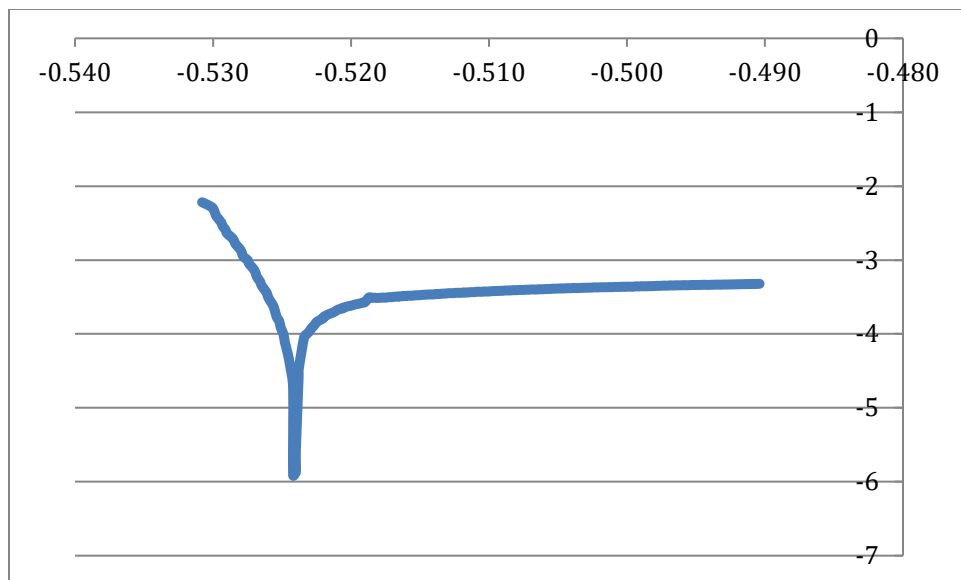


Figure 70 -Potentiodynamic curve for *D. bastinii*-day 15

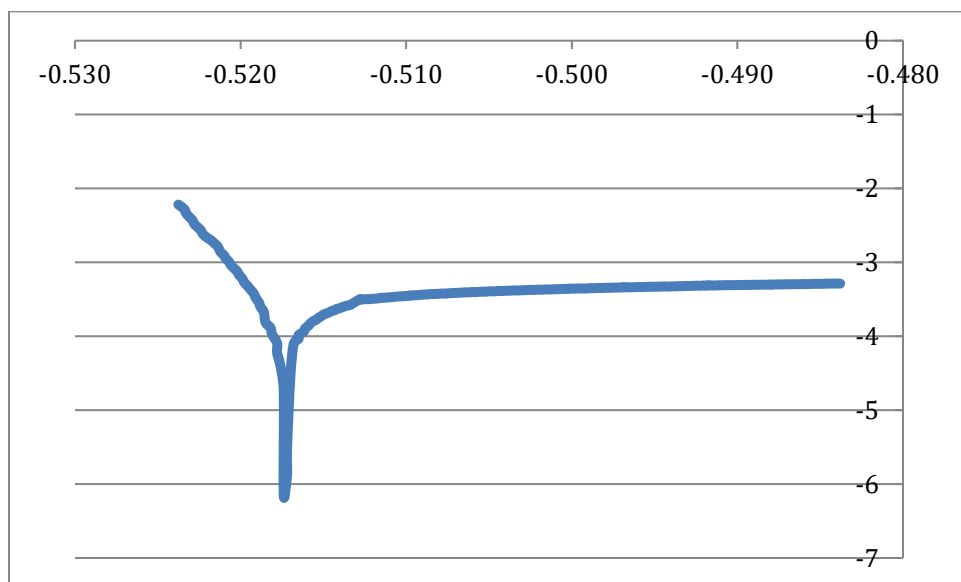


Figure 71 -Potentiodynamic curve for *D. bastinii*-day 16

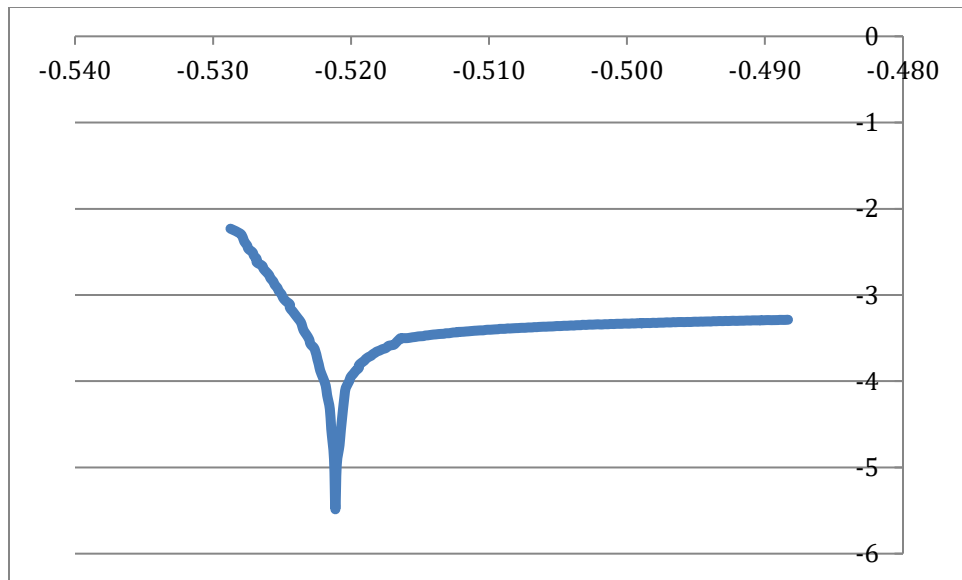


Figure 72 -Potentiodynamic curve for *D. bastinii*-day 17

Appendix 5b

Polarization resistance curves for *D. bastinii*

(In the following graphs vertical axis is current (I) in A, and horizontal axis is potential in V vs. Ag/AgCl reference electrode)

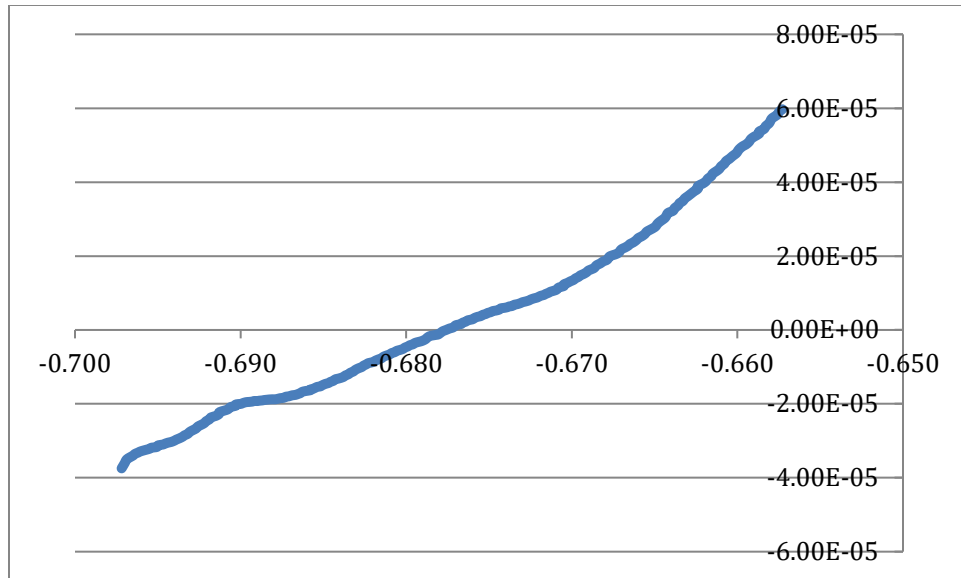


Figure 73 -Polarization resistance curve for *D. bastinii* day 1

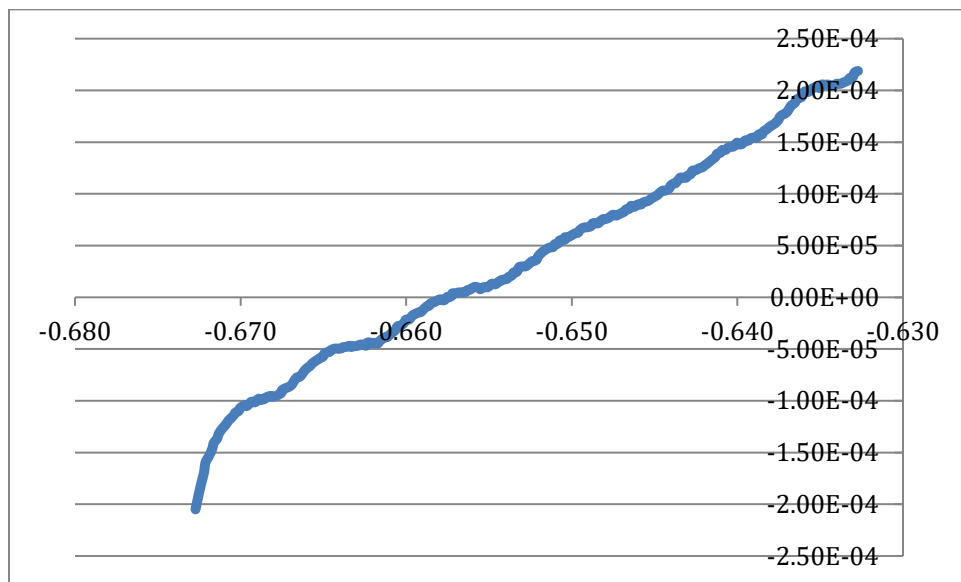


Figure 74 -Polarization resistance curve for *D. bastinii* day 2

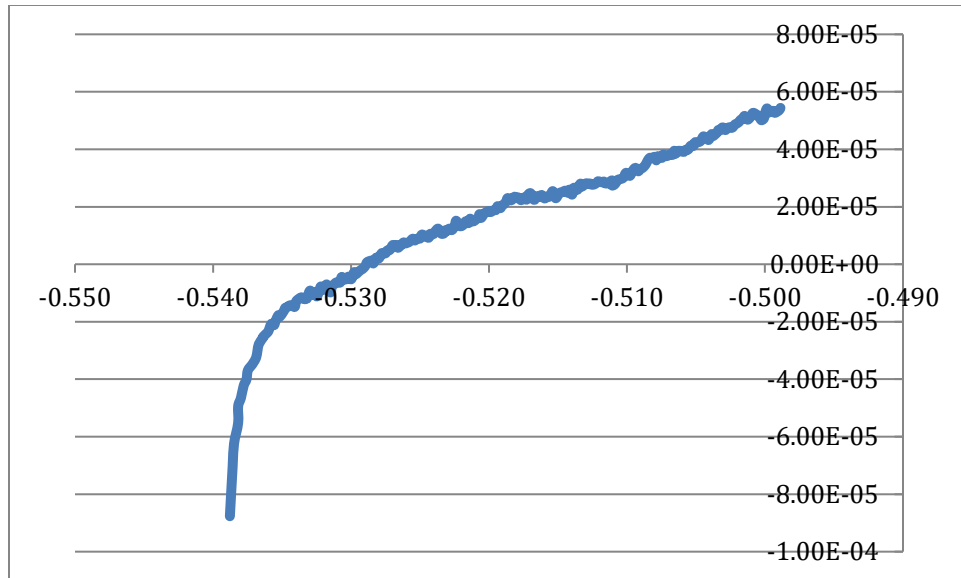


Figure 75 -Polarization resistance curve for *D. bastinii*-day 3

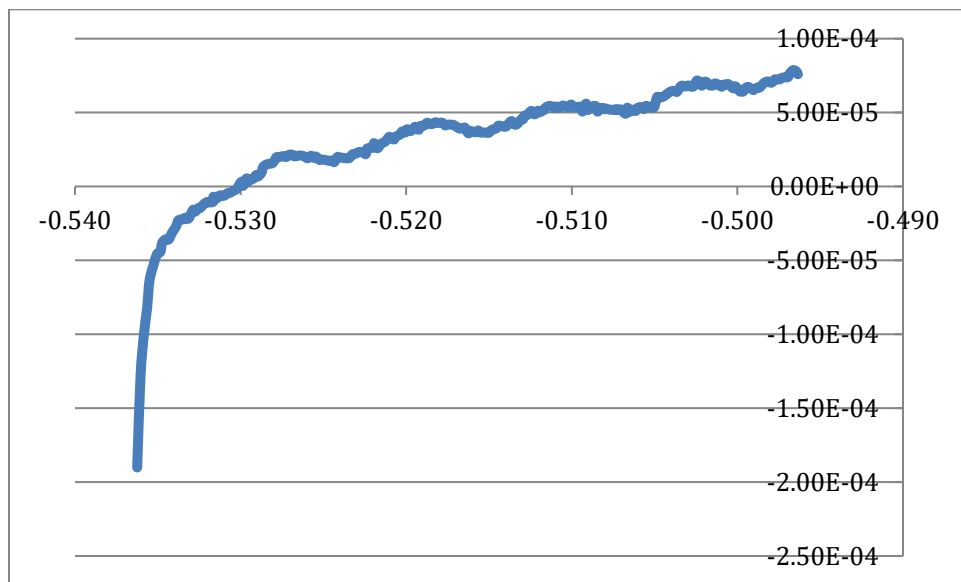


Figure 76 -Polarization resistance curve for *D. bastinii*-day 4

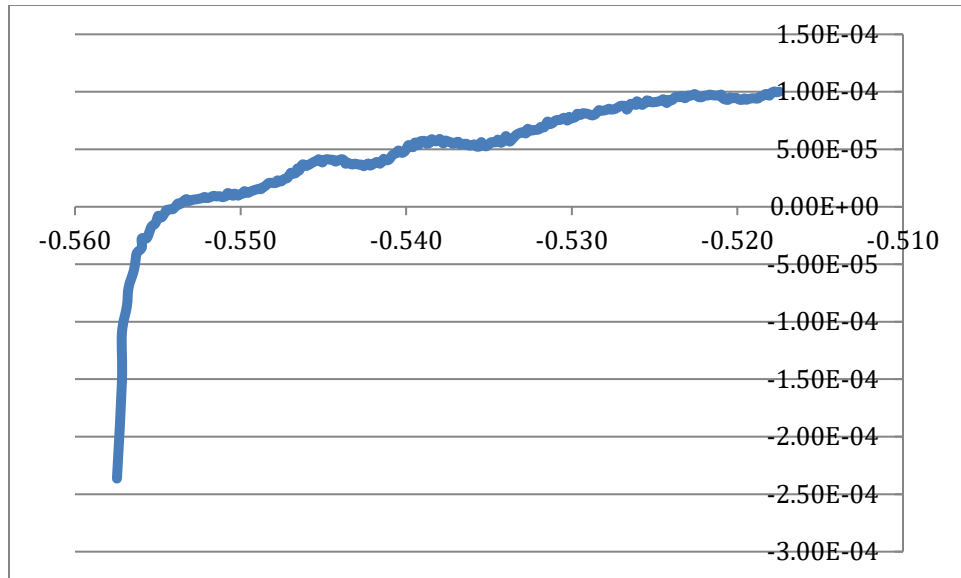


Figure 77 -Polarization resistance curve for *D. bastinii*-day 5

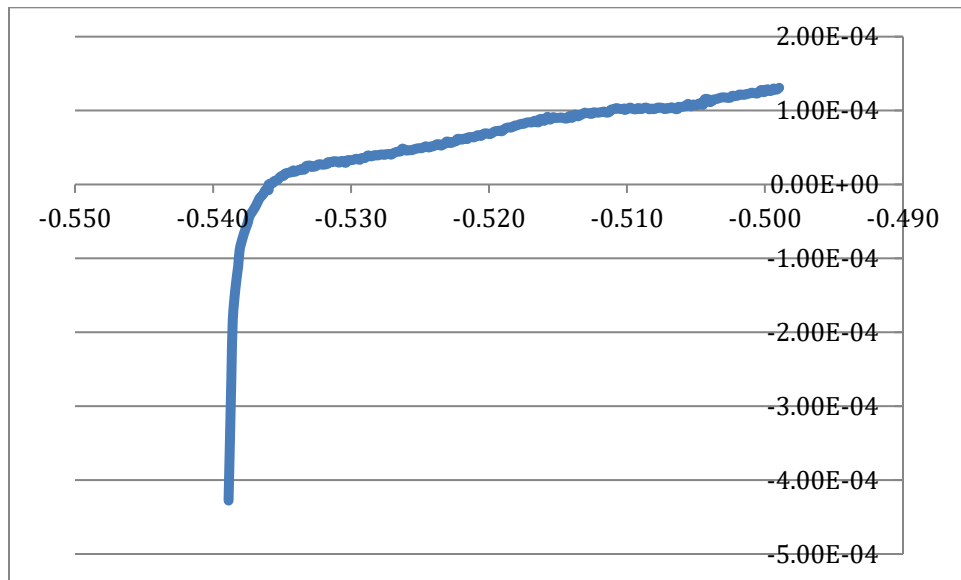


Figure 78 -Polarization resistance curve for *D. bastinii*-day 6

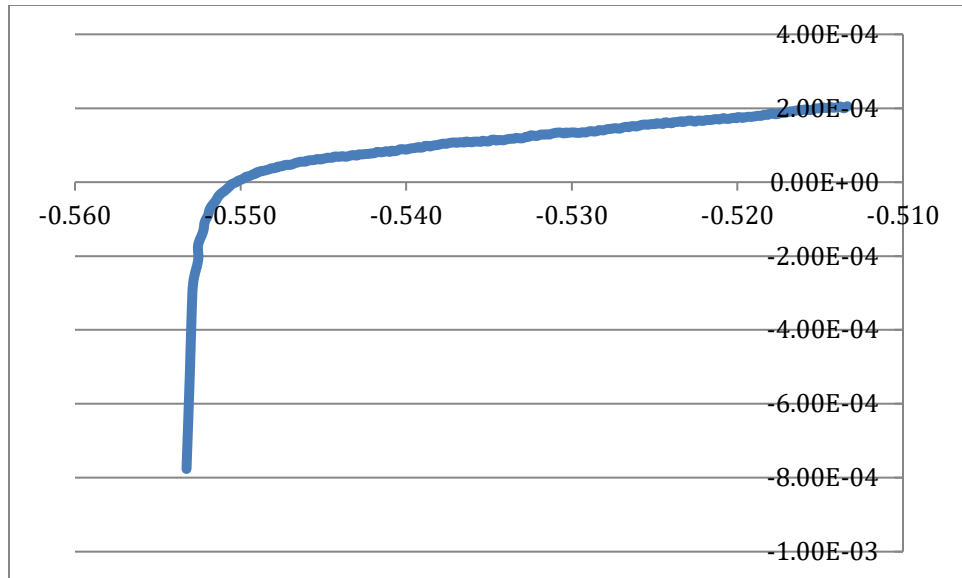


Figure 79 -Polarization resistance curve for *D. bastinii*-day 7

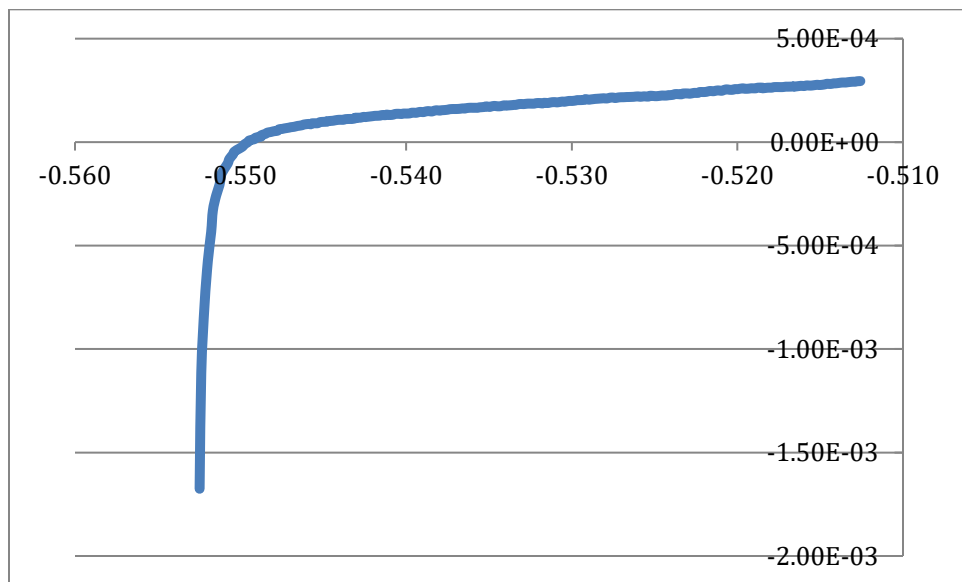


Figure 80 -Polarization resistance curve for *D. bastinii*-day 8

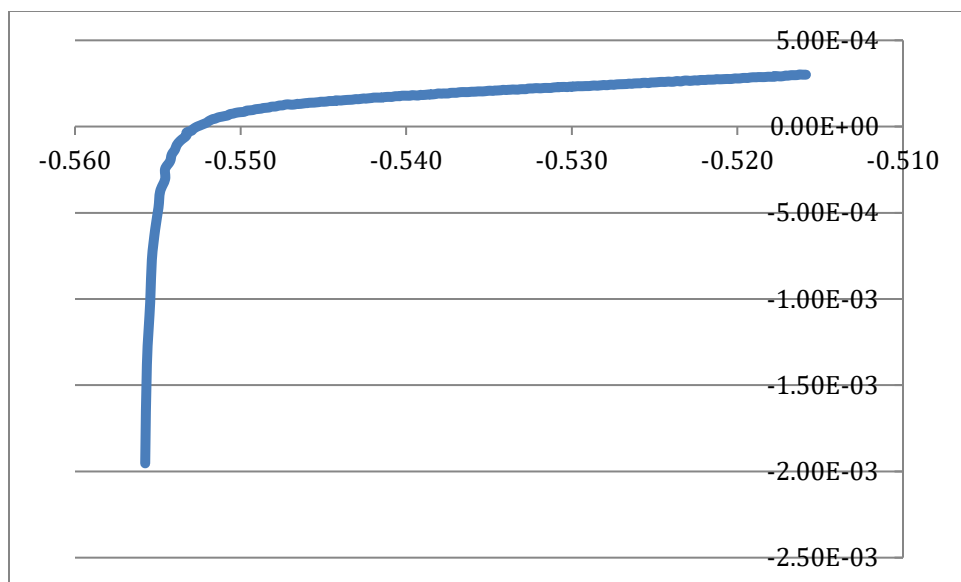


Figure 81 -Polarization resistance curve for *D. bastinii*-day 9

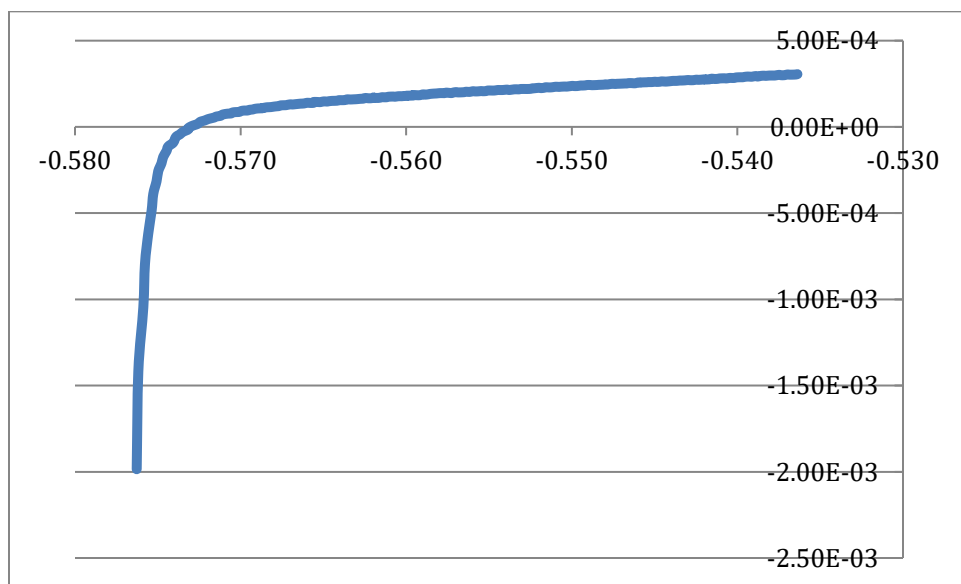


Figure 82 -Polarization resistance curve for *D. bastinii*-day 10

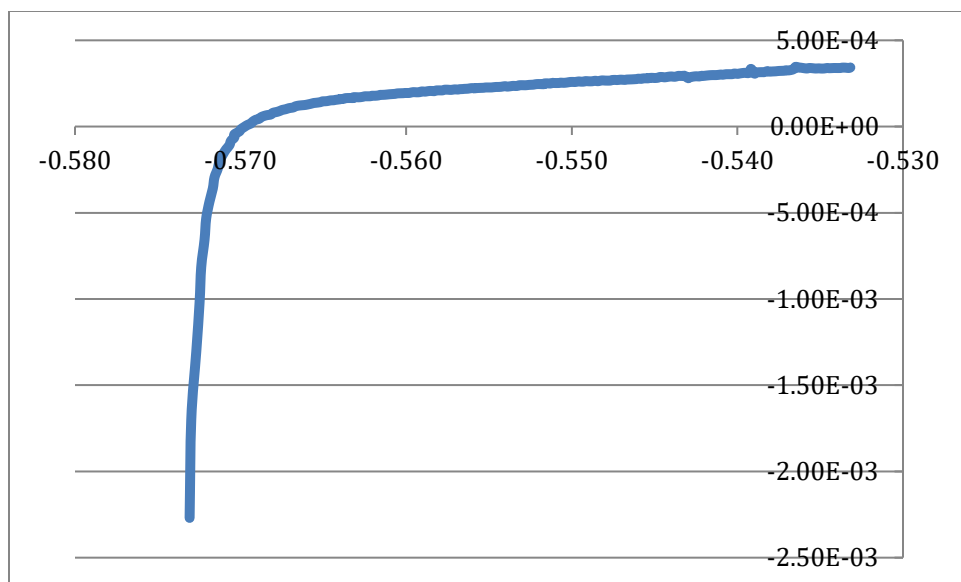


Figure 83 -Polarization resistance curve for *D. bastinii*-day 11

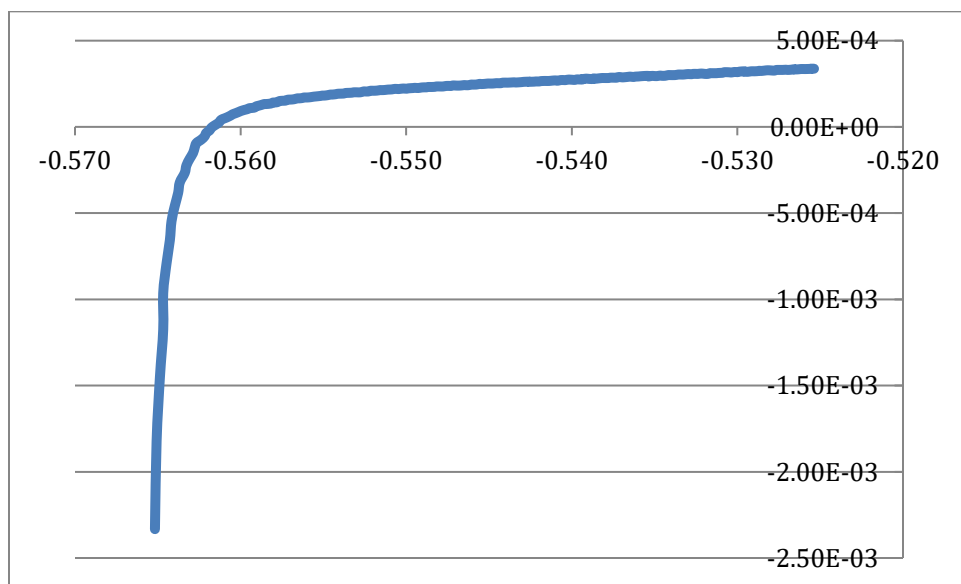


Figure 84 -Polarization resistance curve for *D. bastinii*-day 12

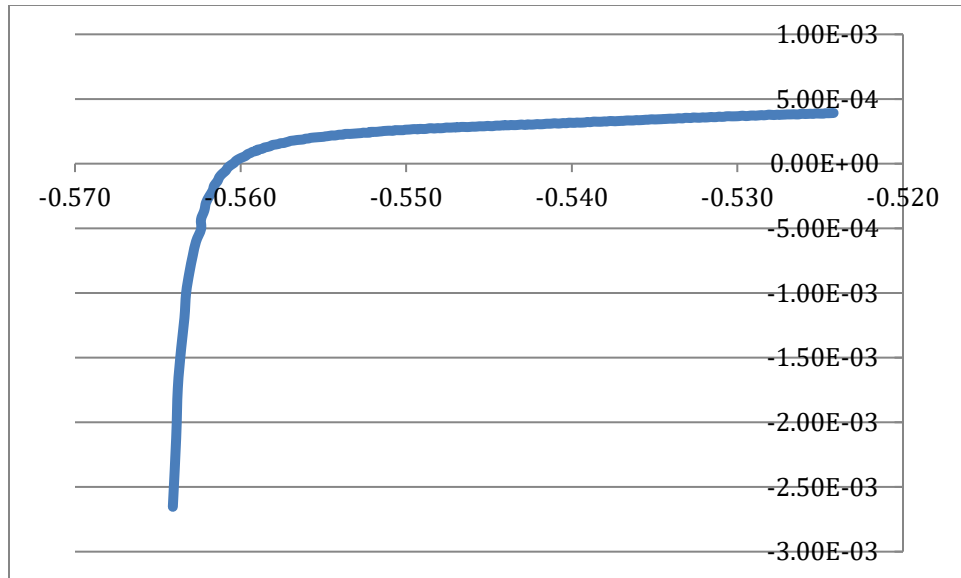


Figure 85 -Polarization resistance curve for *D. bastinii*-day 13

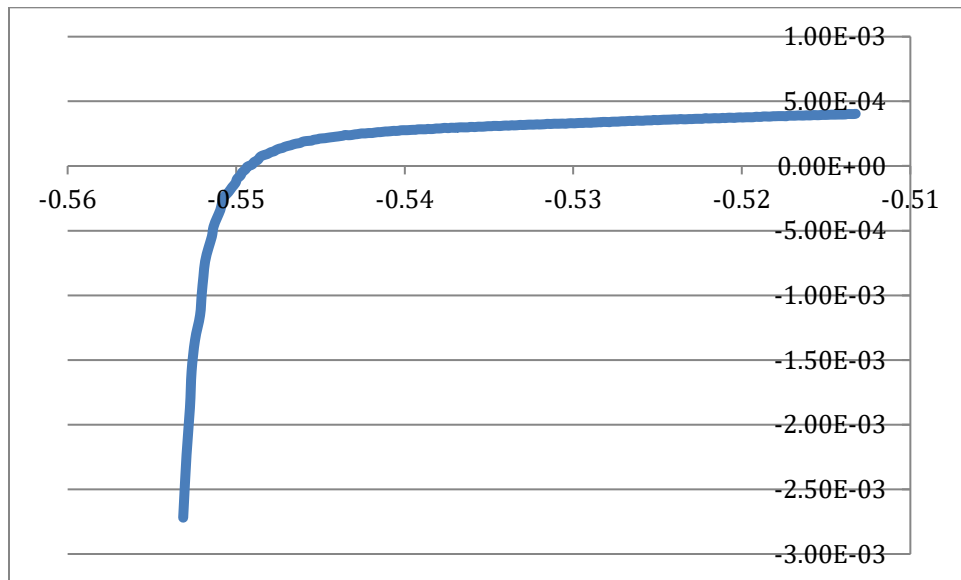


Figure 86 -Polarization resistance curve for *D. bastinii*-day 14

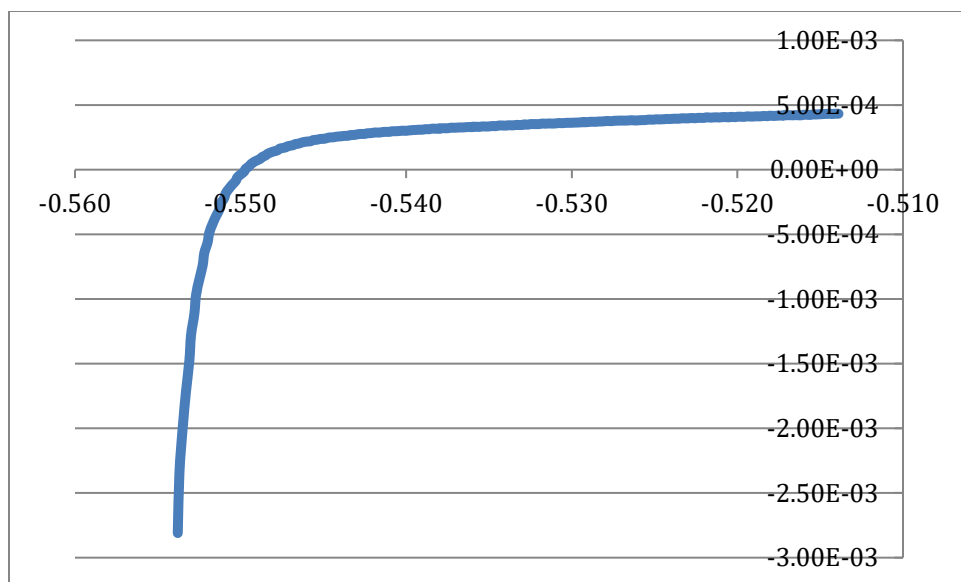


Figure 87 -Polarization resistance curve for *D. bastinii*-day 15

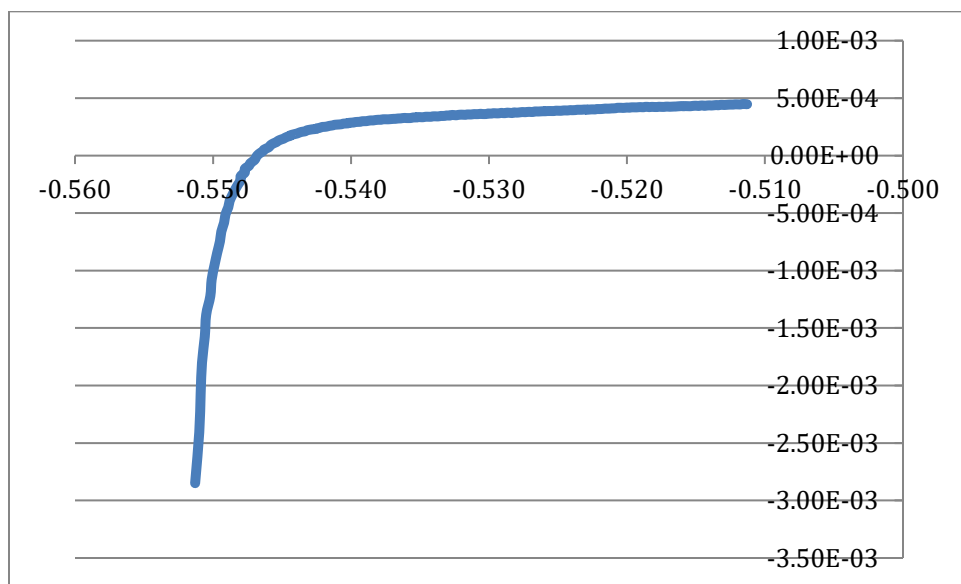


Figure 88 -Polarization resistance curve for *D. bastinii*-day 16

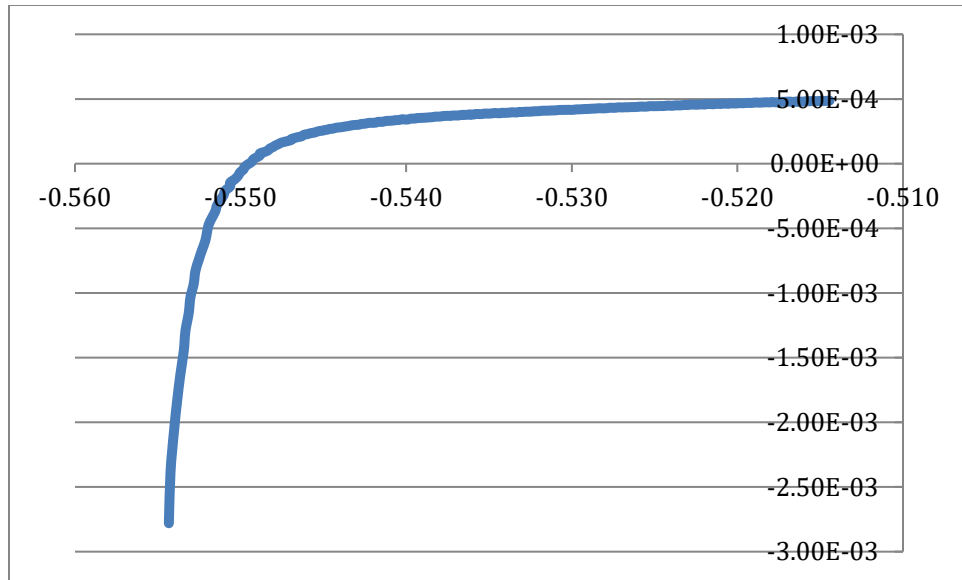


Figure 89 -Polarization resistance curve for *D. bastinii*-day 17

Appendix 6a

Potentiodynamic curves of abiotic system

(In the following graphs vertical axis is log (current) in A, and horizontal axis is potential in V vs. Ag/AgCl reference electrode)

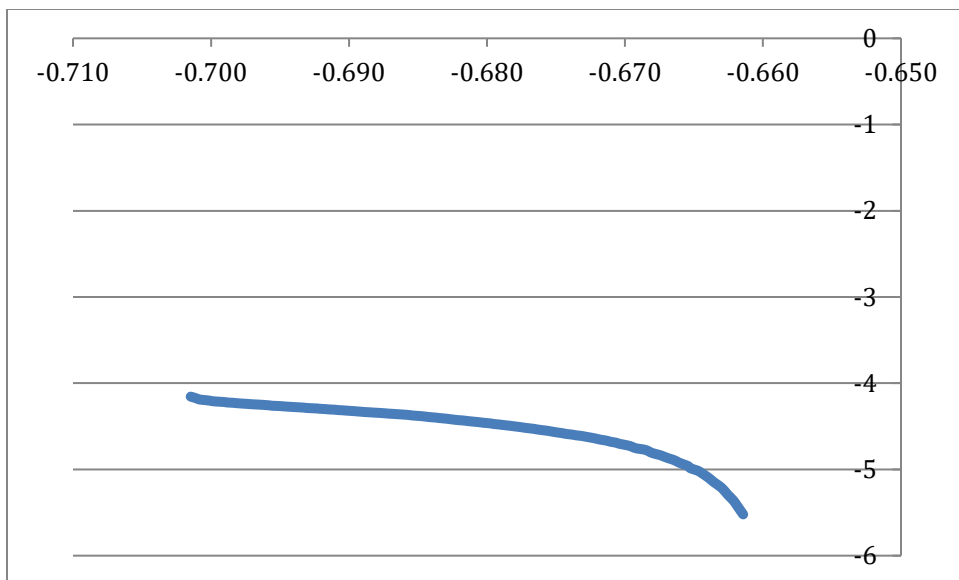


Figure 90- Potentiodynamic curve in abiotic system- Day 1

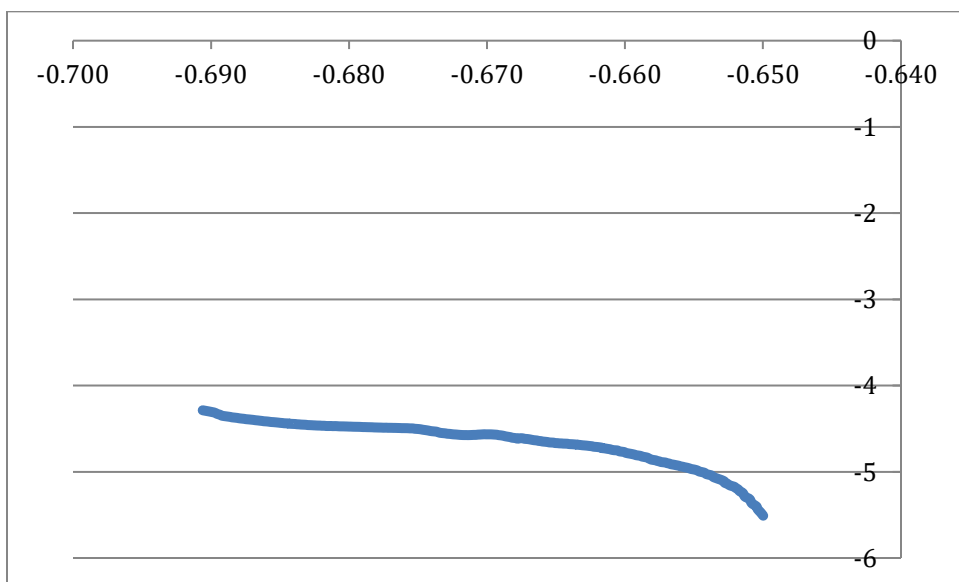


Figure 91- Potentiodynamic curve in abiotic system- Day 2

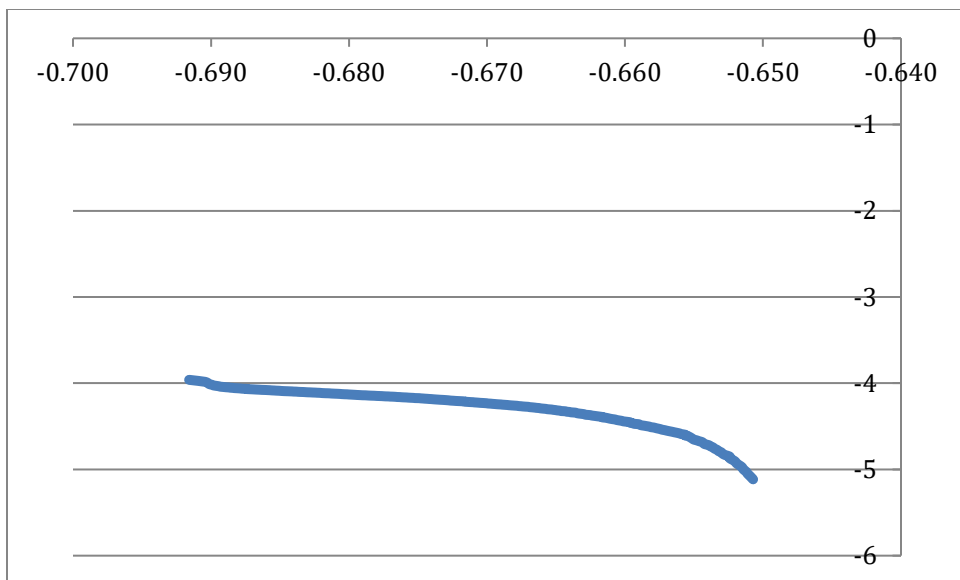


Figure 92- Potentiodynamic curve in abiotic system- Day 3

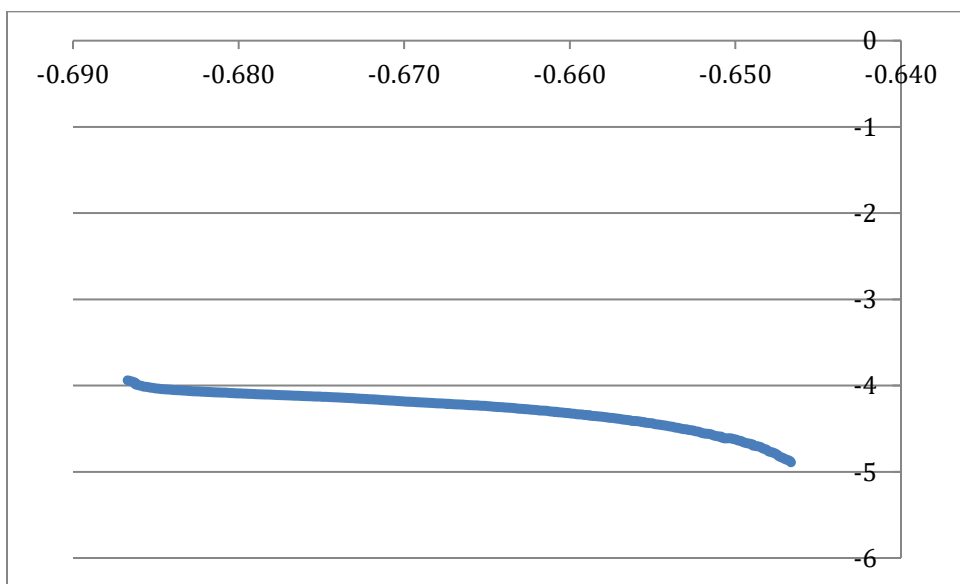


Figure 93- Potentiodynamic curve in abiotic system- Day 4

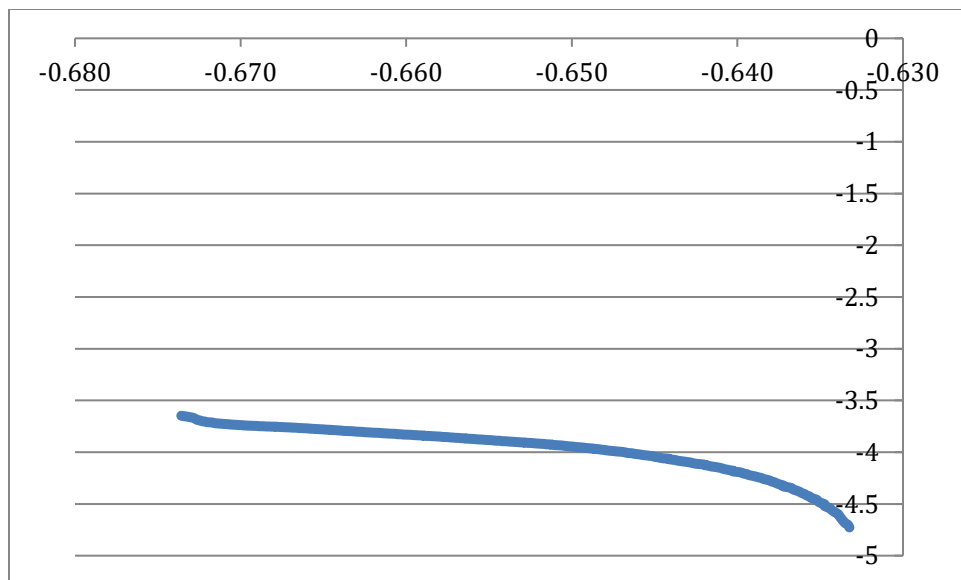


Figure 94- Potentiodynamic curve in abiotic system- Day 5

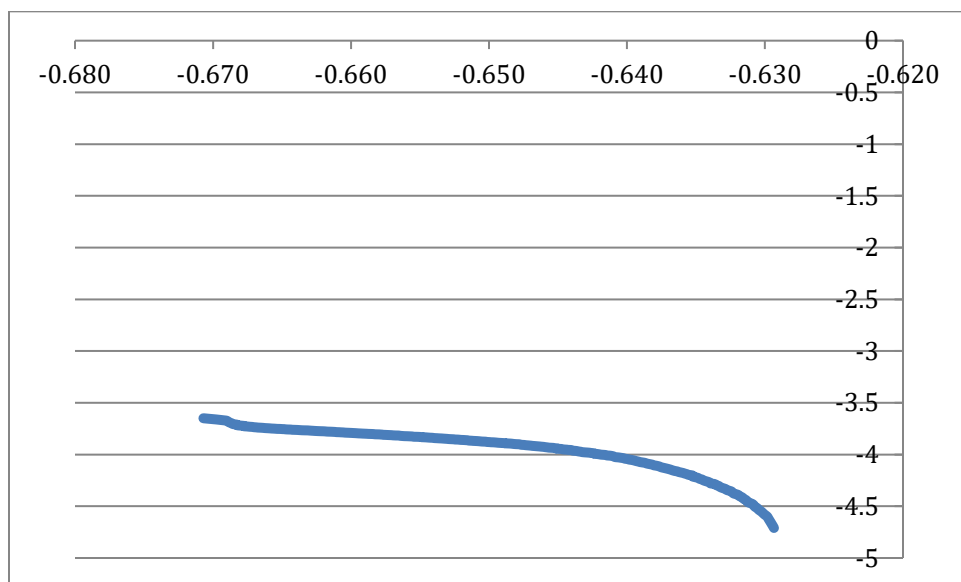


Figure 95- Potentiodynamic curve in abiotic system- Day 7

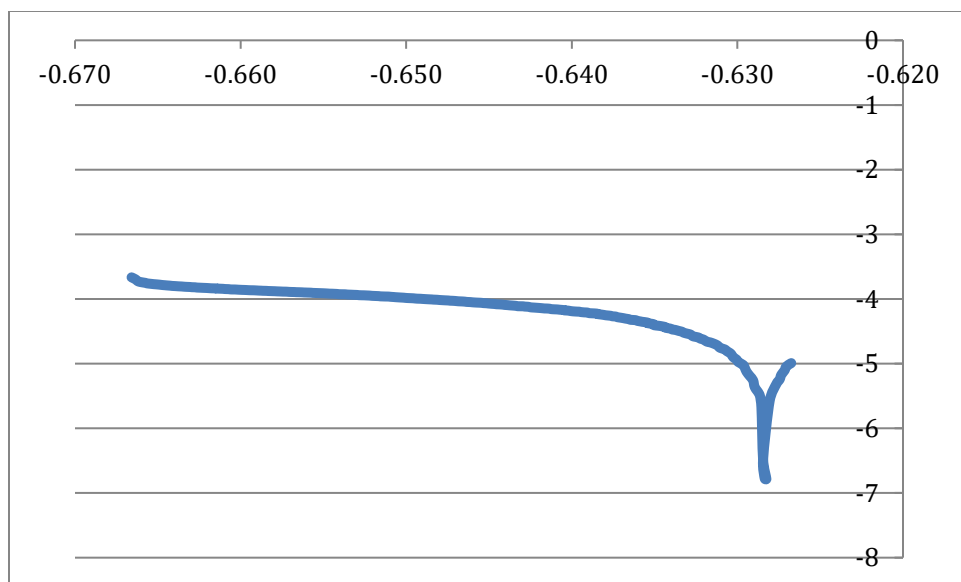


Figure 96- Potentiodynamic curve in abiotic system- Day 8

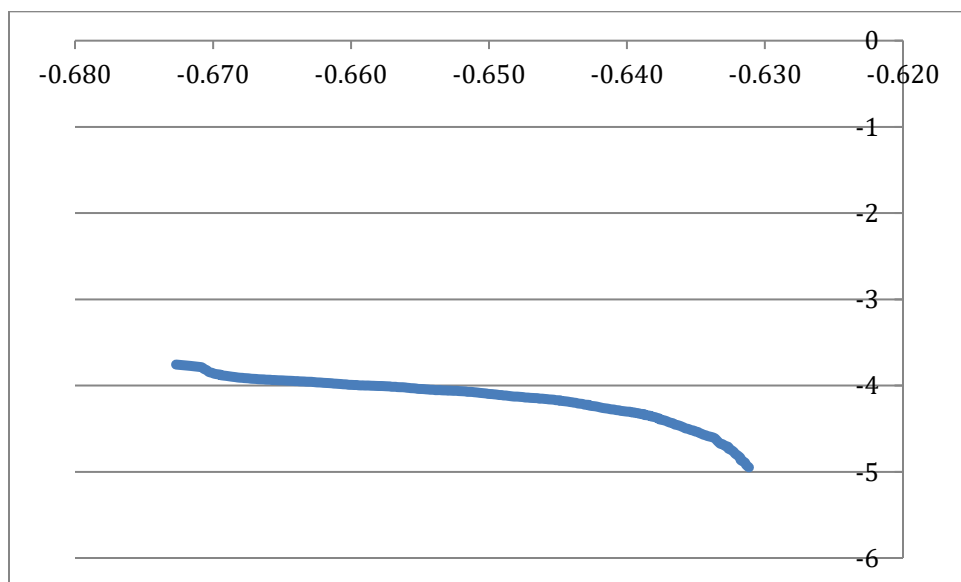


Figure 97- Potentiodynamic curve in abiotic system- Day 9

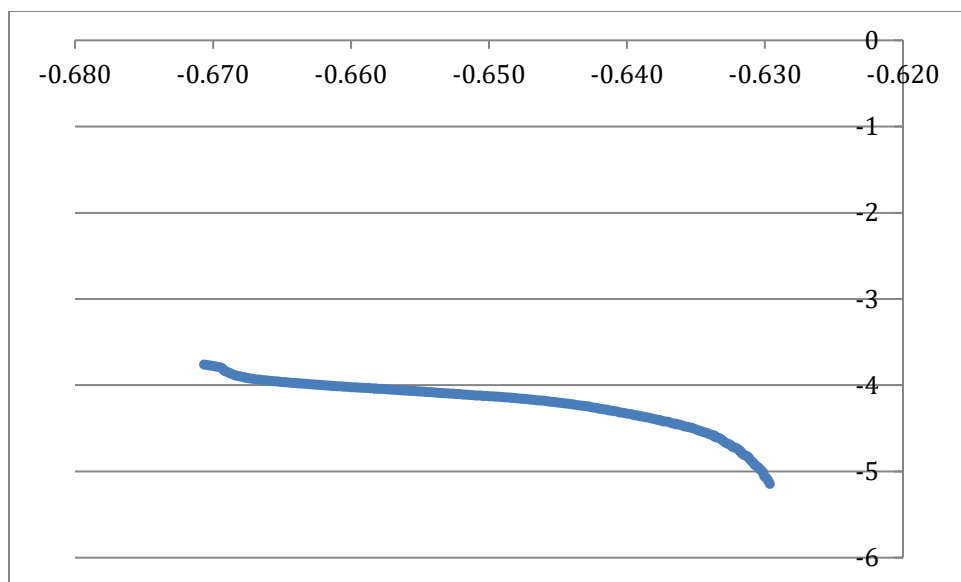


Figure 98- Potentiodynamic curve in abiotic system- Day 10

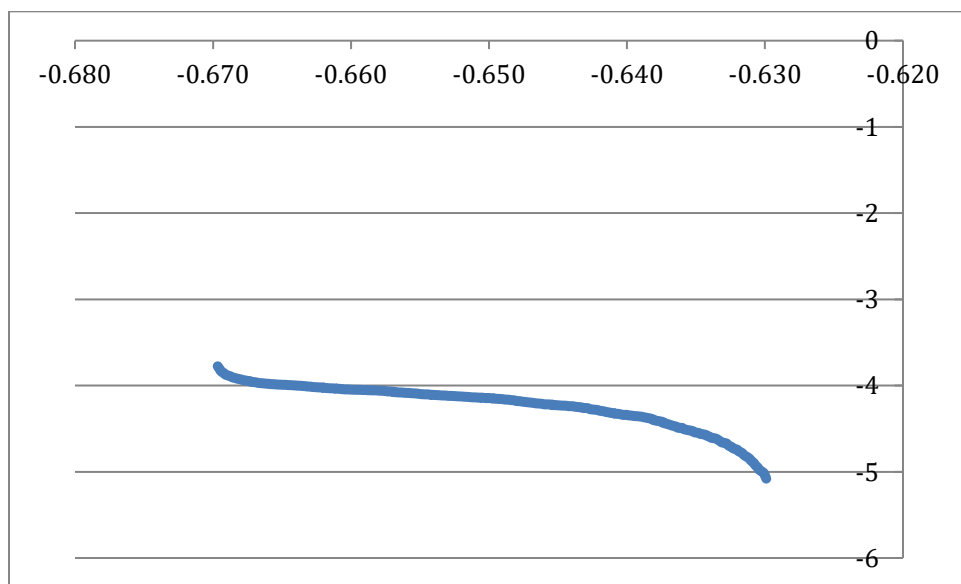


Figure 99- Potentiodynamic curve in abiotic system- Day 11

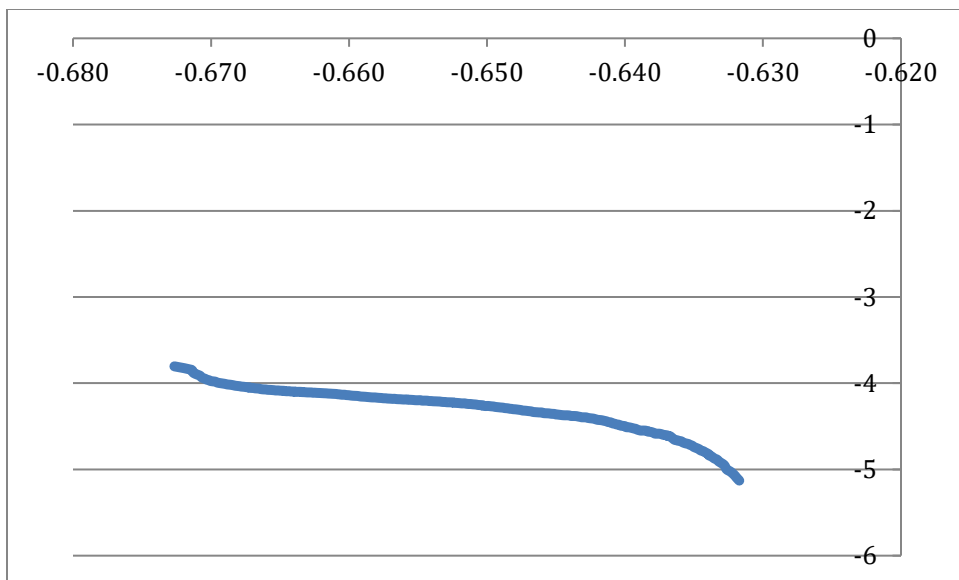


Figure 100- Potentiodynamic curve in abiotic system- Day 12

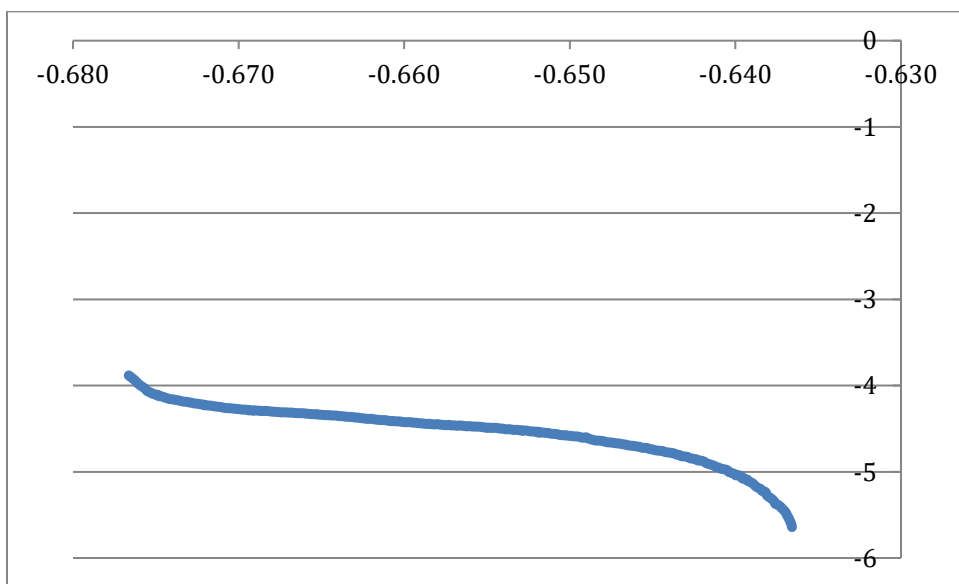


Figure 101- Potentiodynamic curve in abiotic system- Day 13

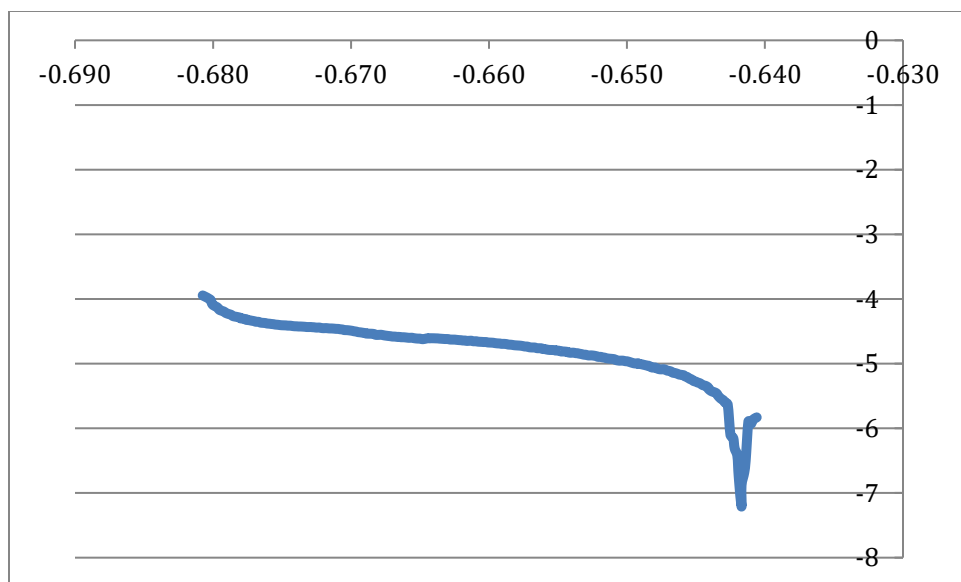


Figure 102- Potentiodynamic curve in abiotic system- Day 14

Appendix 6b

Polarization resistance curves for abiotic system

(In the following graphs vertical axis is current (I) in A, and horizontal axis is potential in V vs. Ag/AgCl reference electrode)

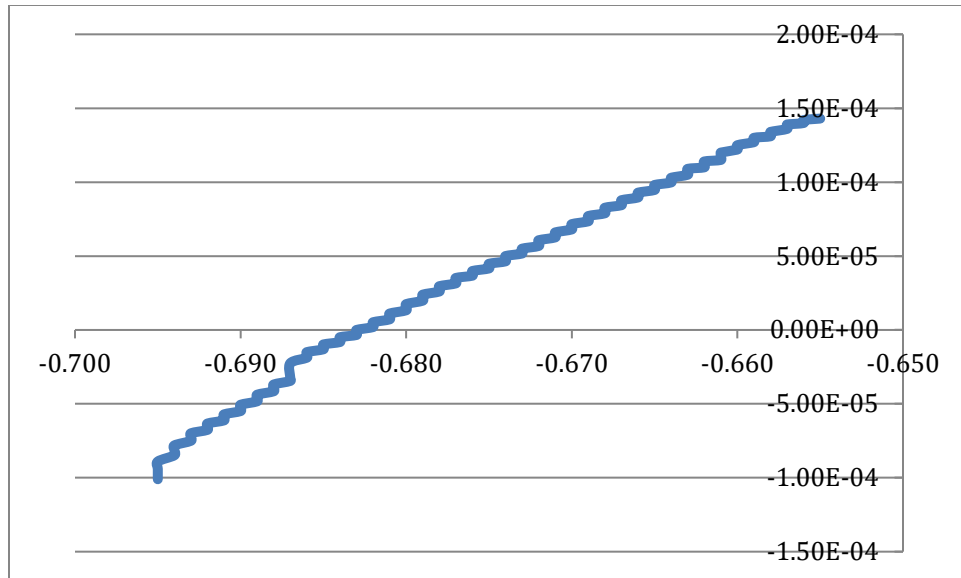


Figure 103 -Polarization resistance curve for abiotic system-Day 1

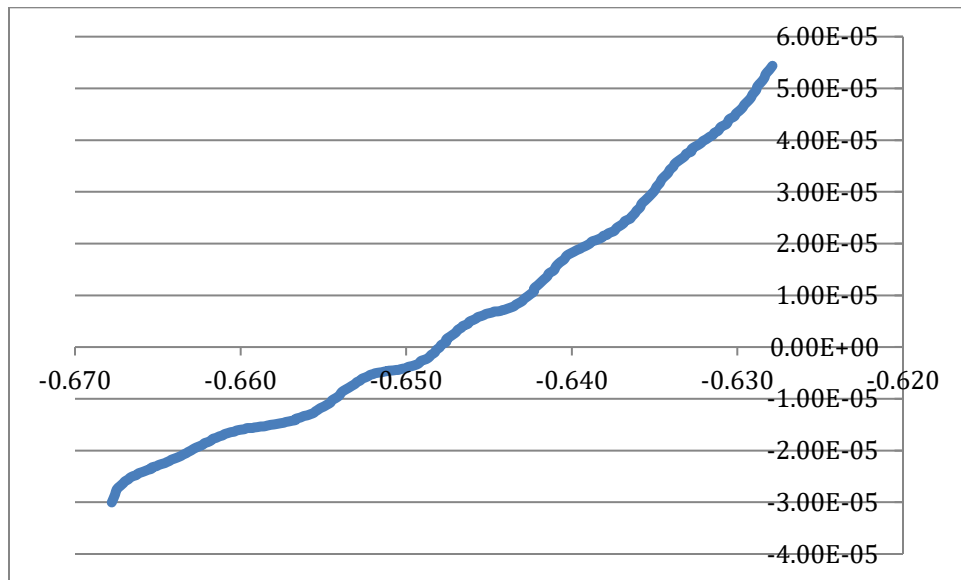


Figure 104 -Polarization resistance curve for abiotic system-Day 2

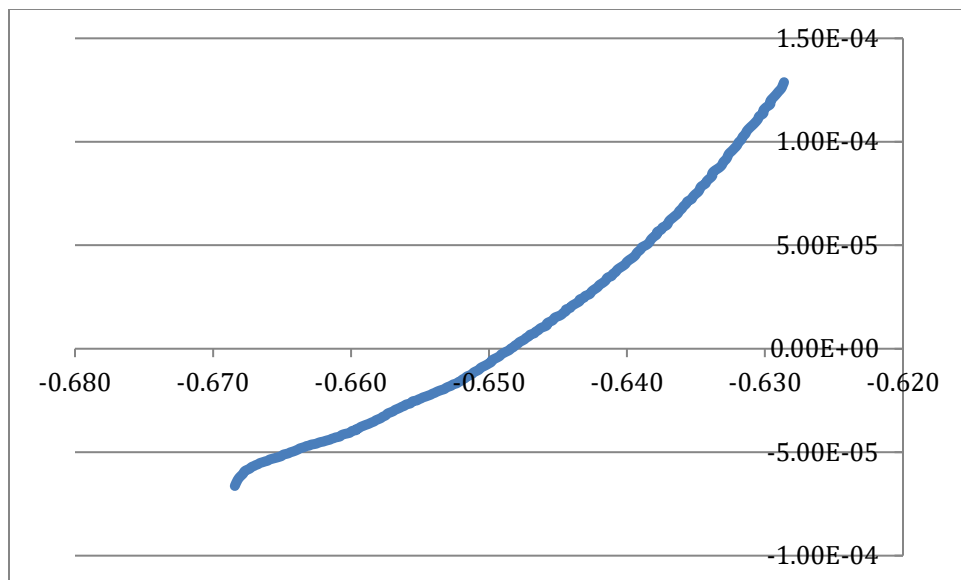


Figure 105 -Polarization resistance curve for abiotic system-Day 3

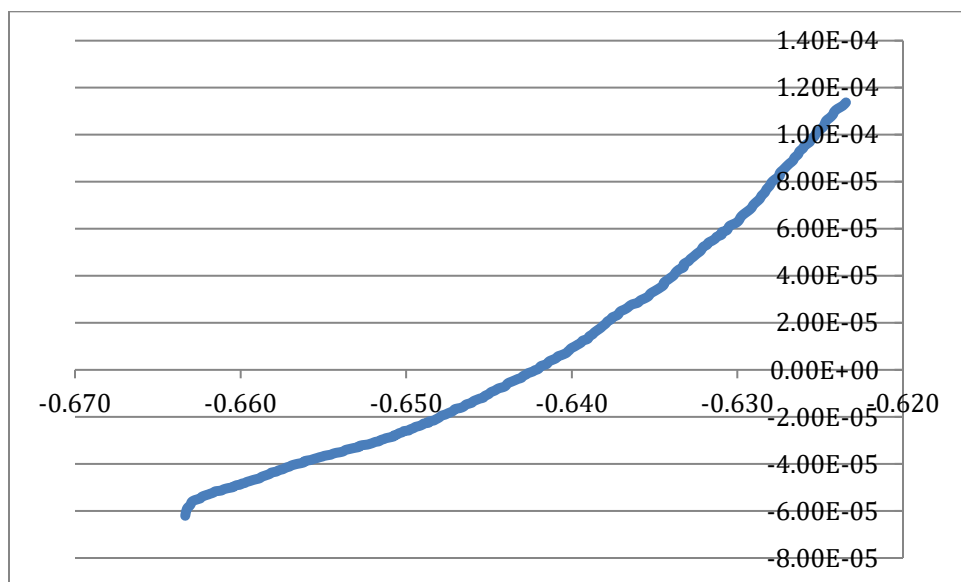


Figure 106 -Polarization resistance curve for abiotic system-Day 4

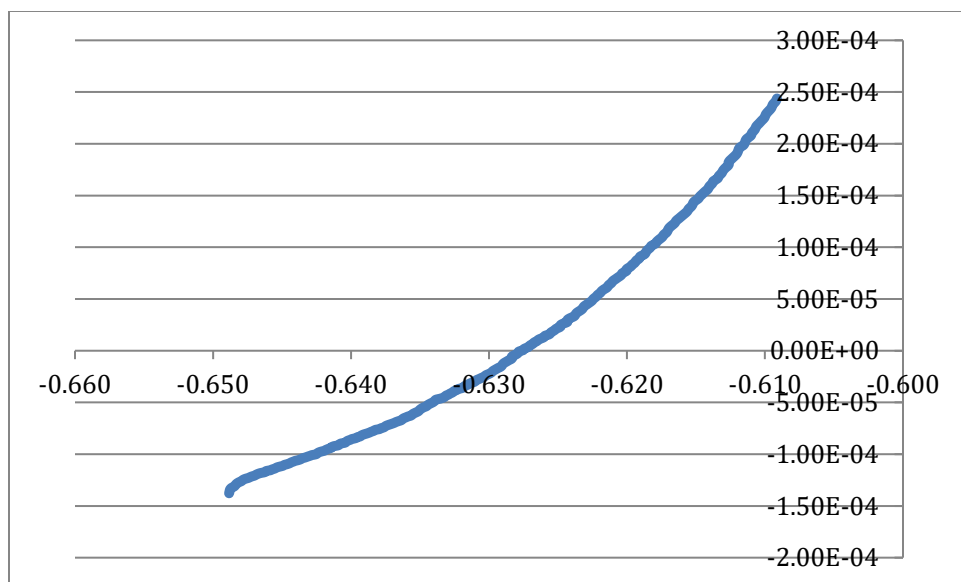


Figure 107 -Polarization resistance curve for abiotic system-Day 5

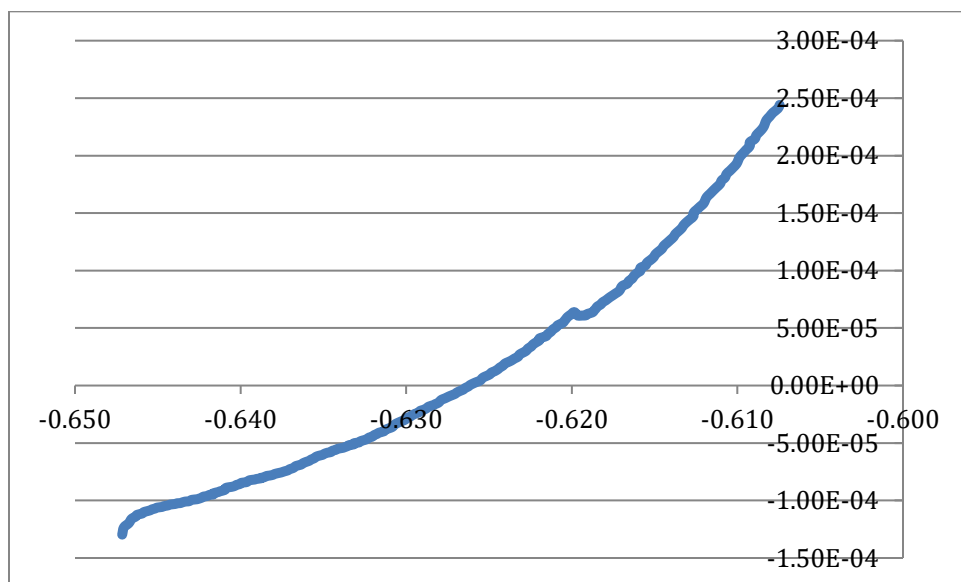


Figure 108 -Polarization resistance curve for abiotic system-Day 7

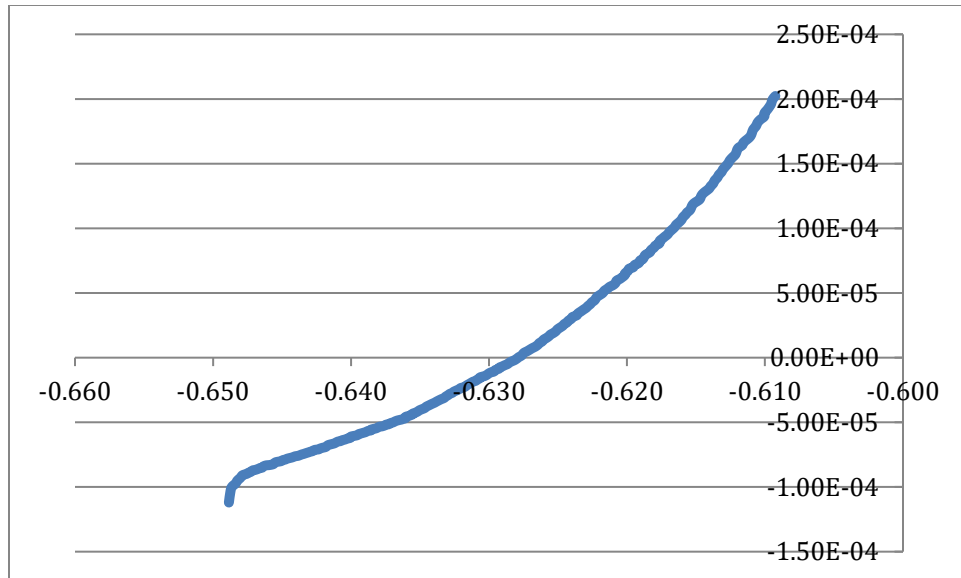


Figure 109 -Polarization resistance curve for abiotic system-Day 8

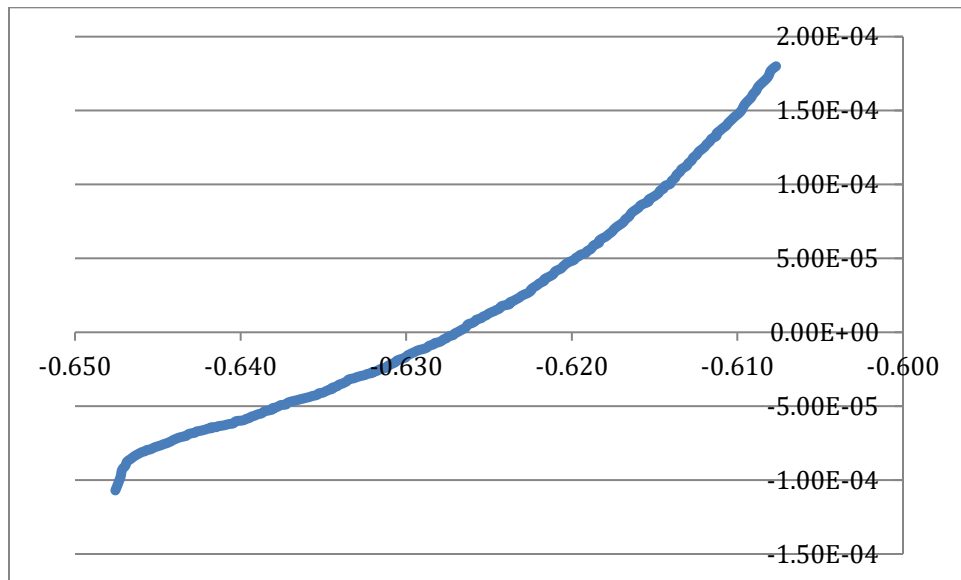


Figure 110 -Polarization resistance curve for abiotic system-Day 9

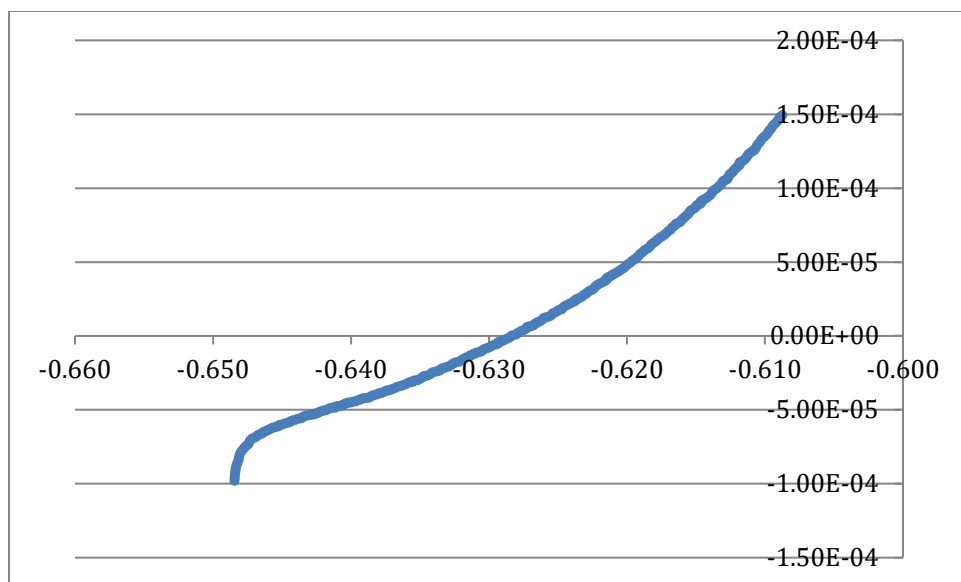


Figure 111 -Polarization resistance curve for abiotic system-Day 10

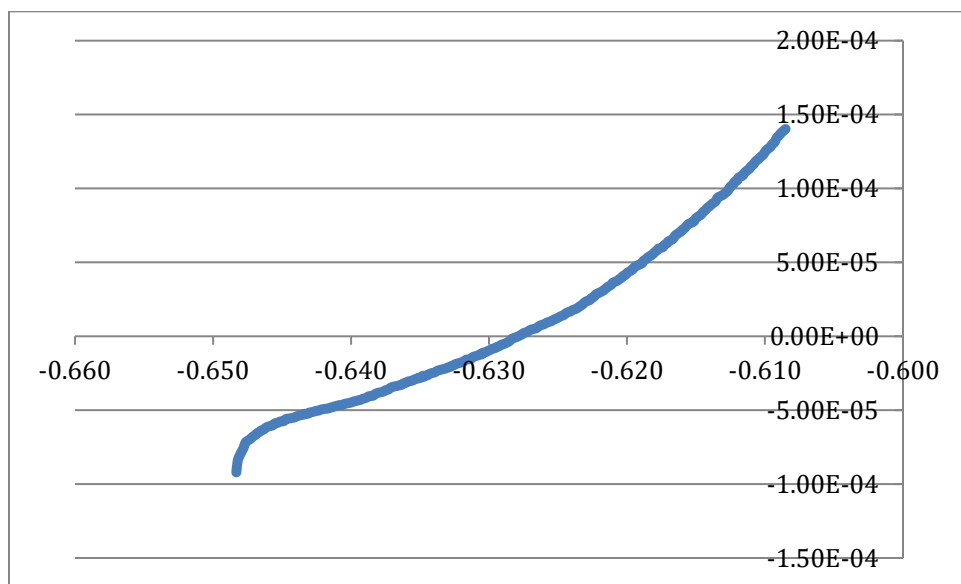


Figure 112 -Polarization resistance curve for abiotic system-Day 11

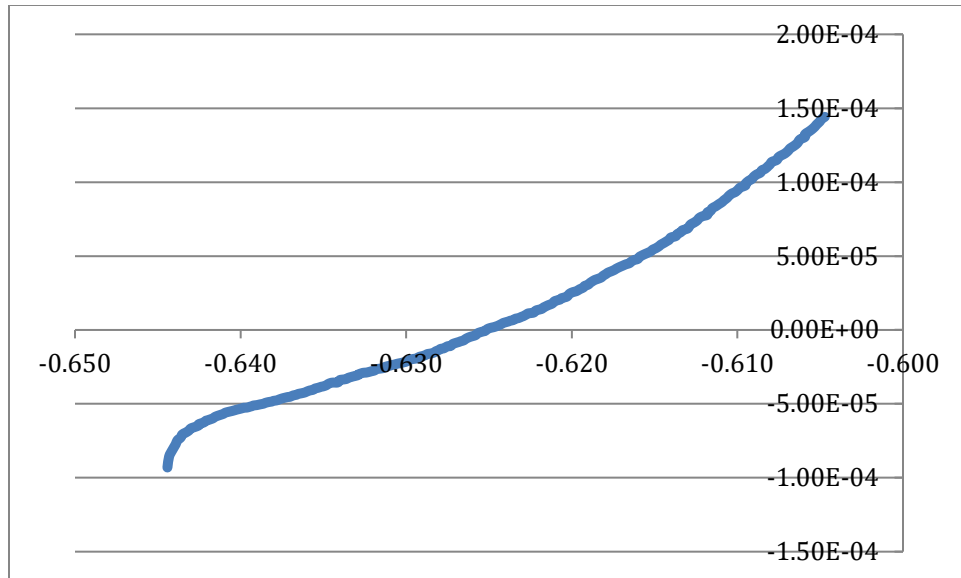


Figure 113 -Polarization resistance curve for abiotic system-Day 12

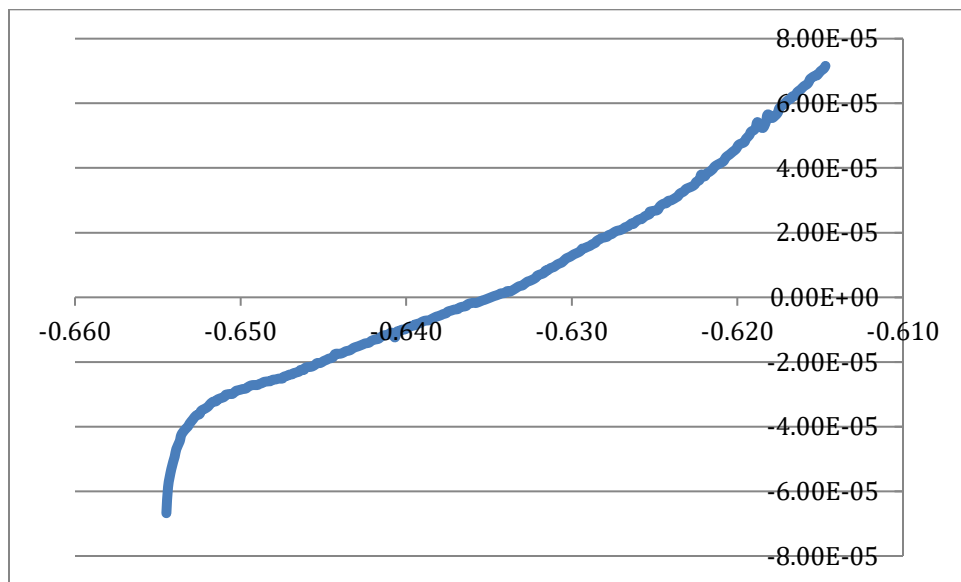


Figure 114 -Polarization resistance curve for abiotic system-Day 13

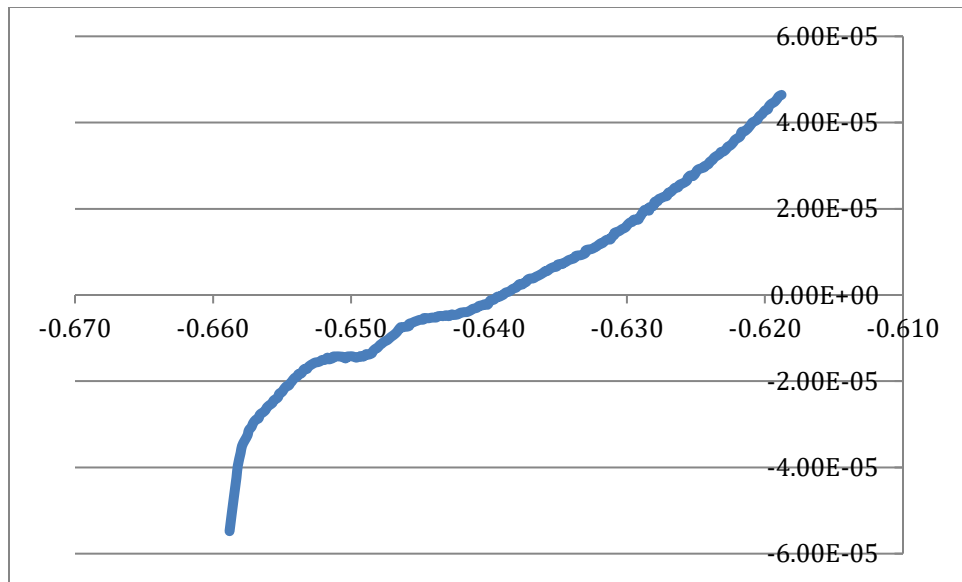


Figure 115 -Polarization resistance curve for abiotic system-Day 14

Appendix 7a

FTIR spectra for *D. vulgaris*

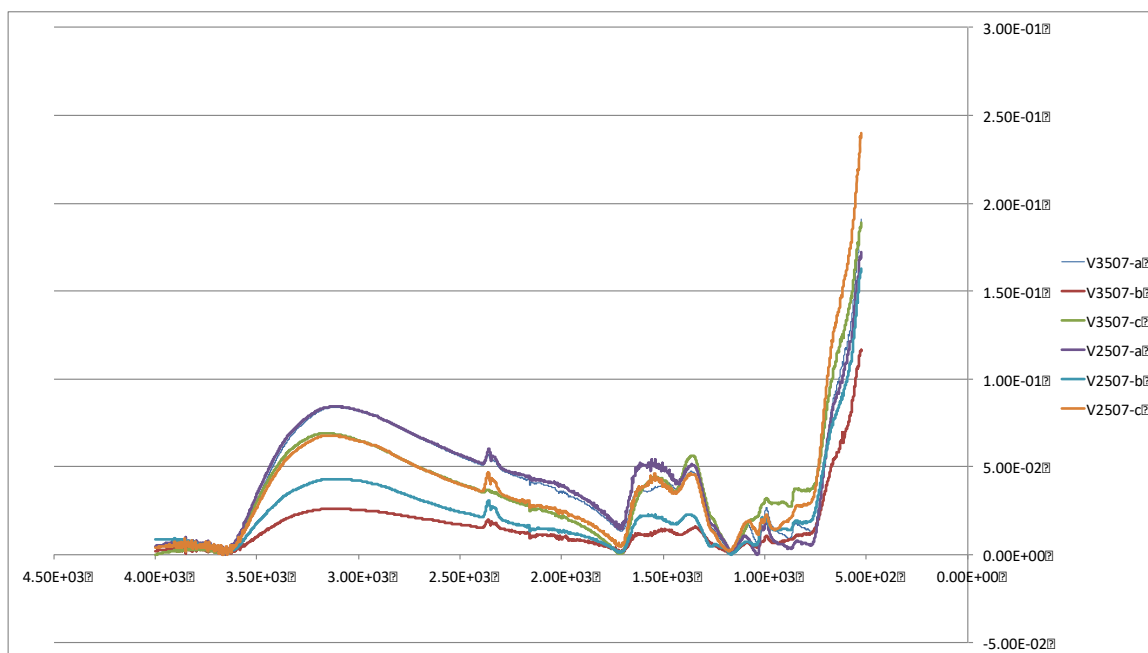


Figure 116-FTIR spectra for samples at 25 & 35°C at 7 days for *D. vulgaris* in 1249 media.

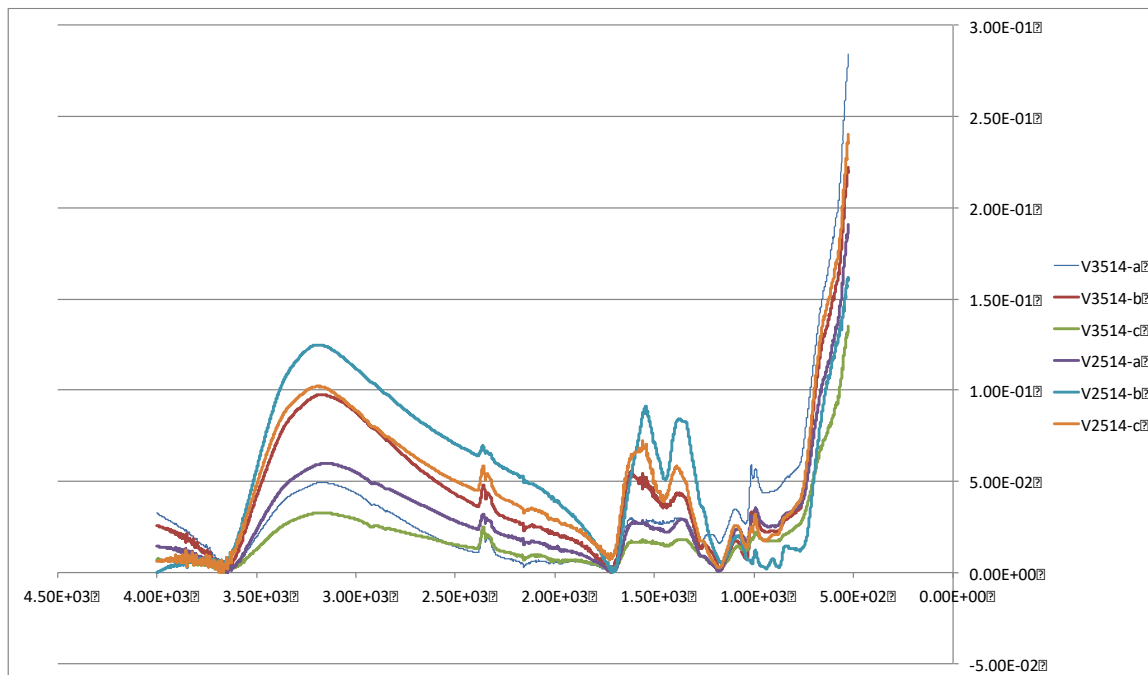


Figure 117-FTIR spectra for samples at 25 & 35°C at 14 days for *D. vulgaris* in 1249 media.

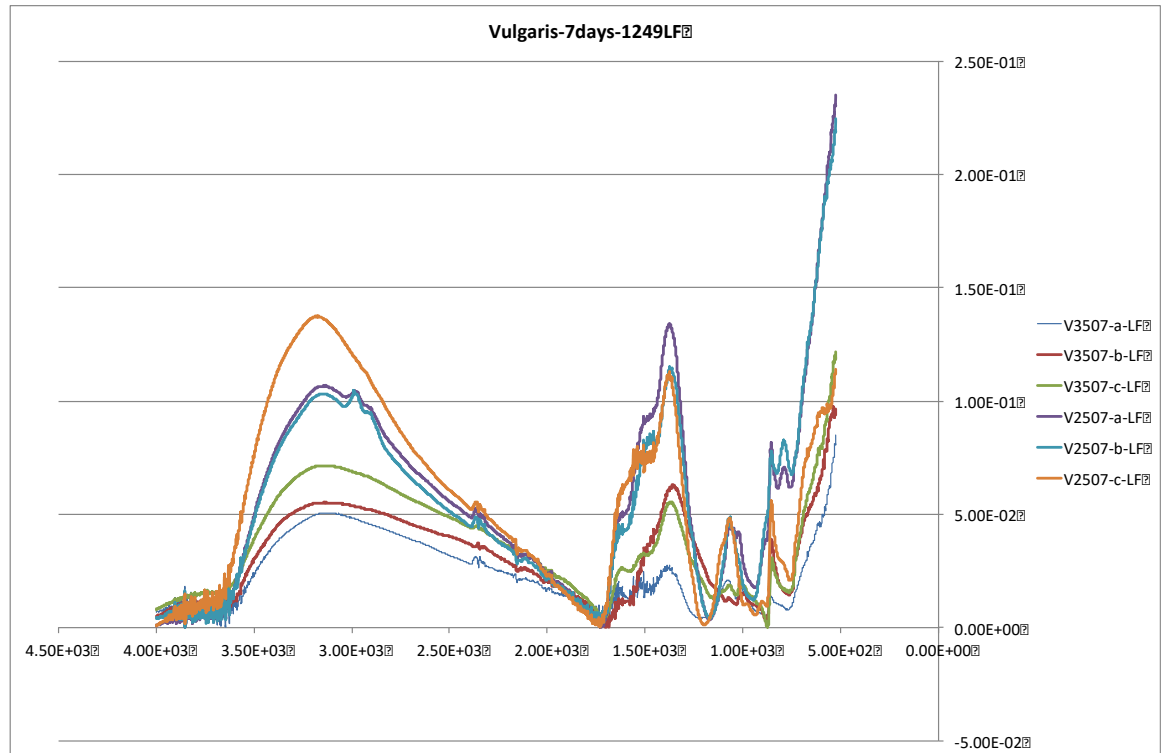


Figure 118-FTIR spectra for samples at 25 & 35°C at 7 days for *D. vulgaris* in 1249-LF media.

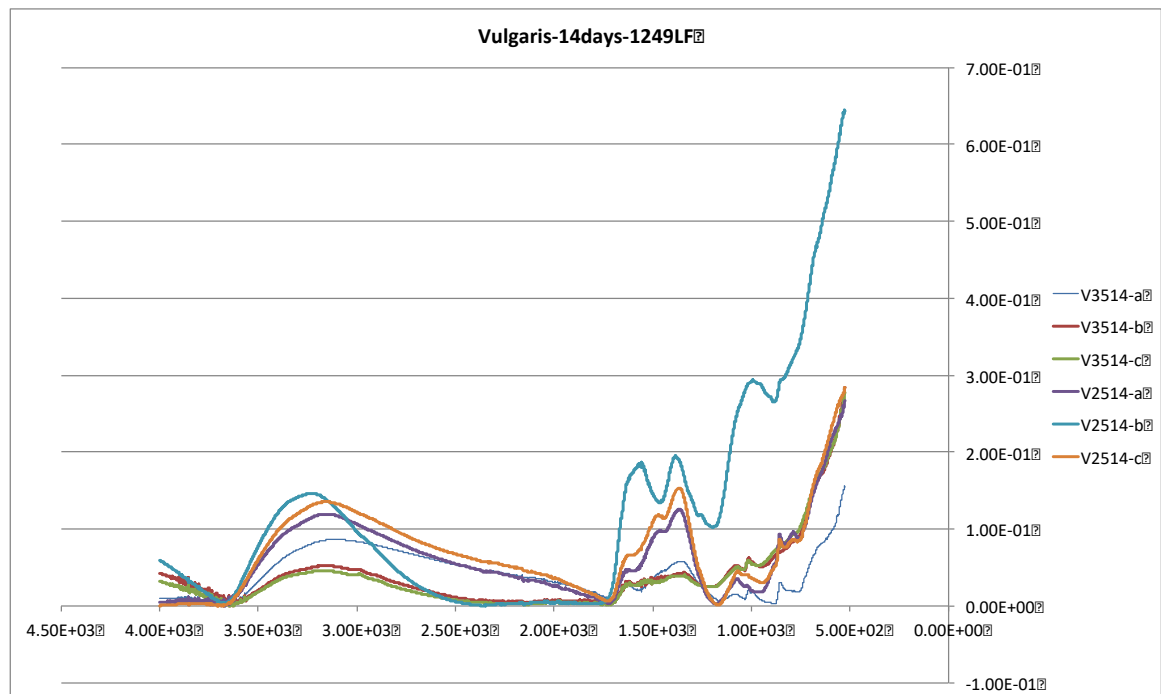


Figure 119-FTIR spectra for samples at 25 & 35°C at 14 days for *D. vulgaris* in 1249-LF media.

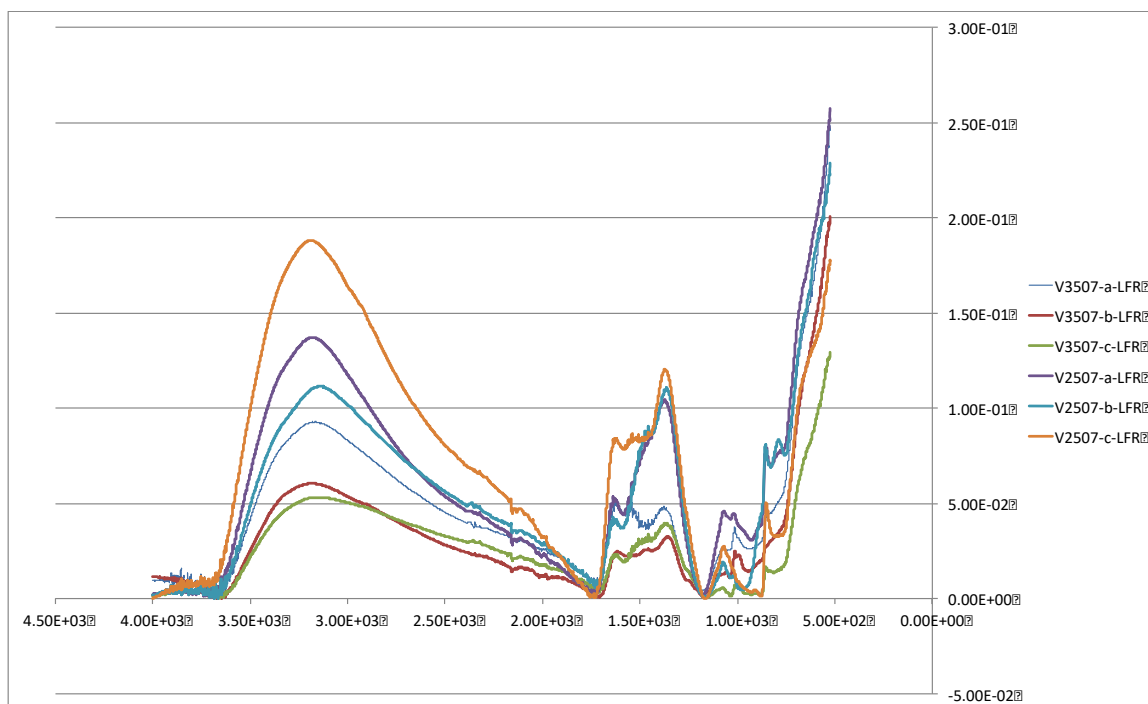


Figure 120-FTIR spectra for samples at 25 & 35°C at 7 days for *D. vulgaris* in 1249-LFR media.

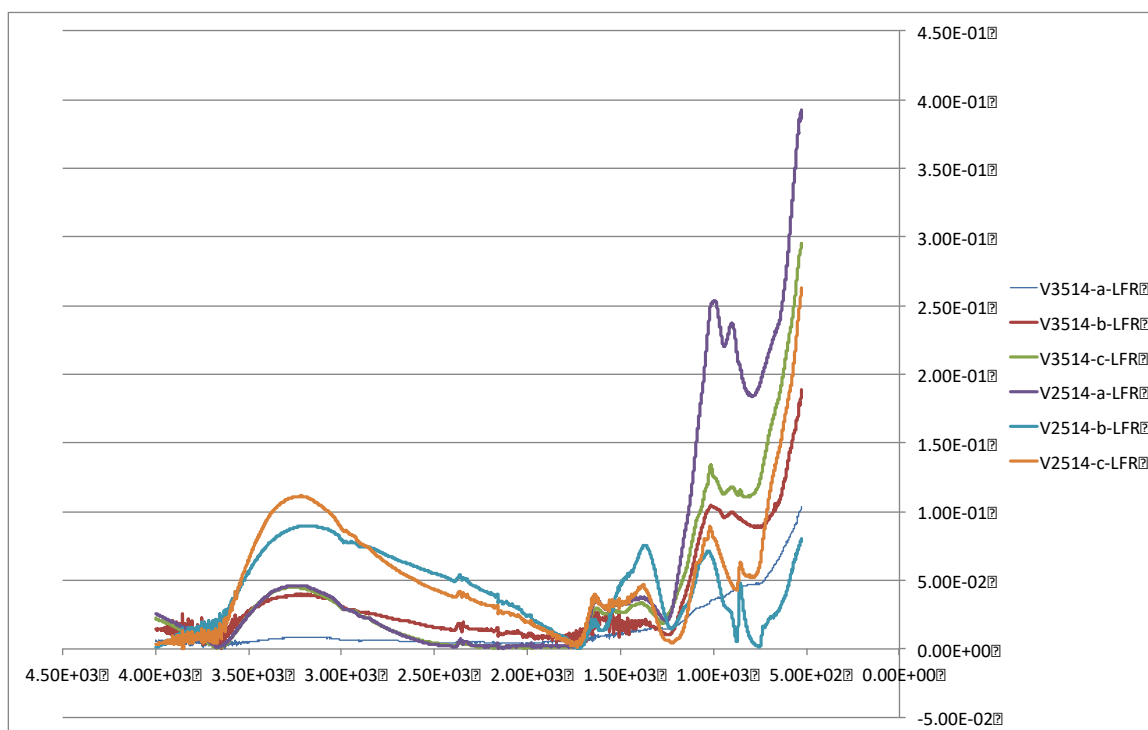


Figure 121-FTIR spectra for samples at 25 & 35°C at 14 days for *D. vulgaris* in 1249-LFR media.

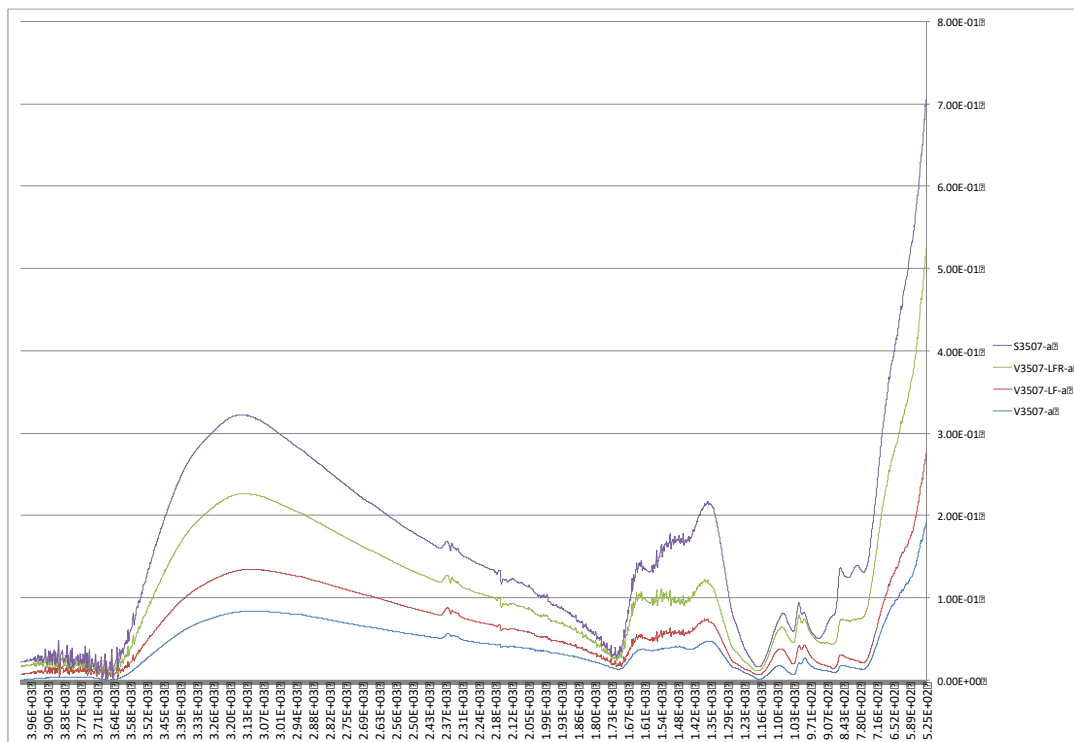


Figure 122-FTIR spectra of selected samples at 35°C and 7 days in different media.

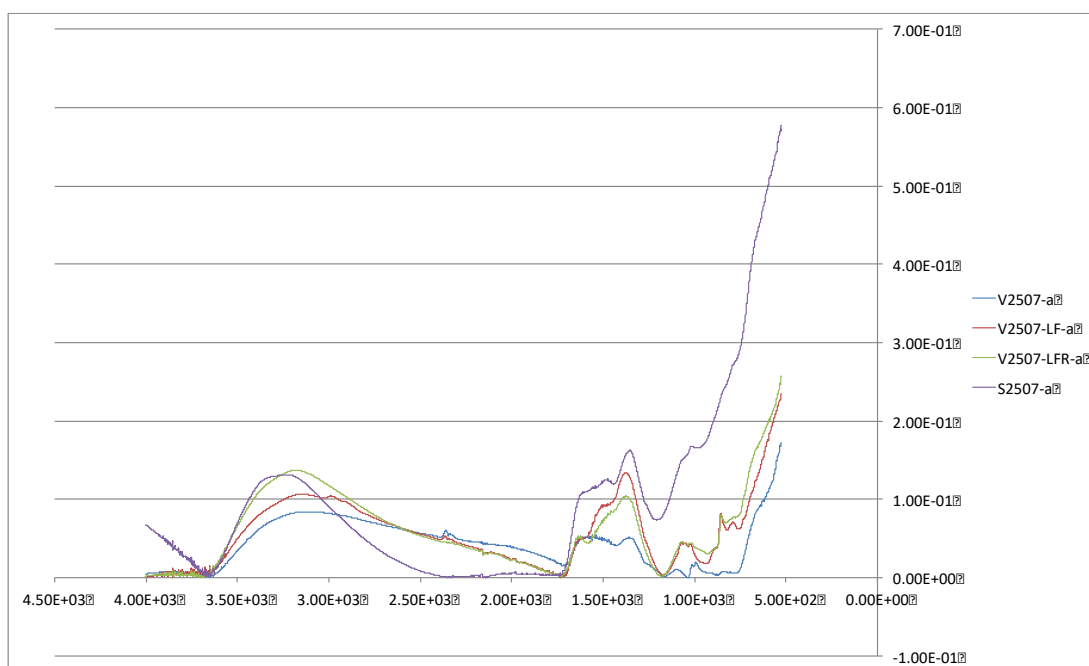


Figure 123-FTIR spectra of selected samples at 35°C and 14 days in different media.

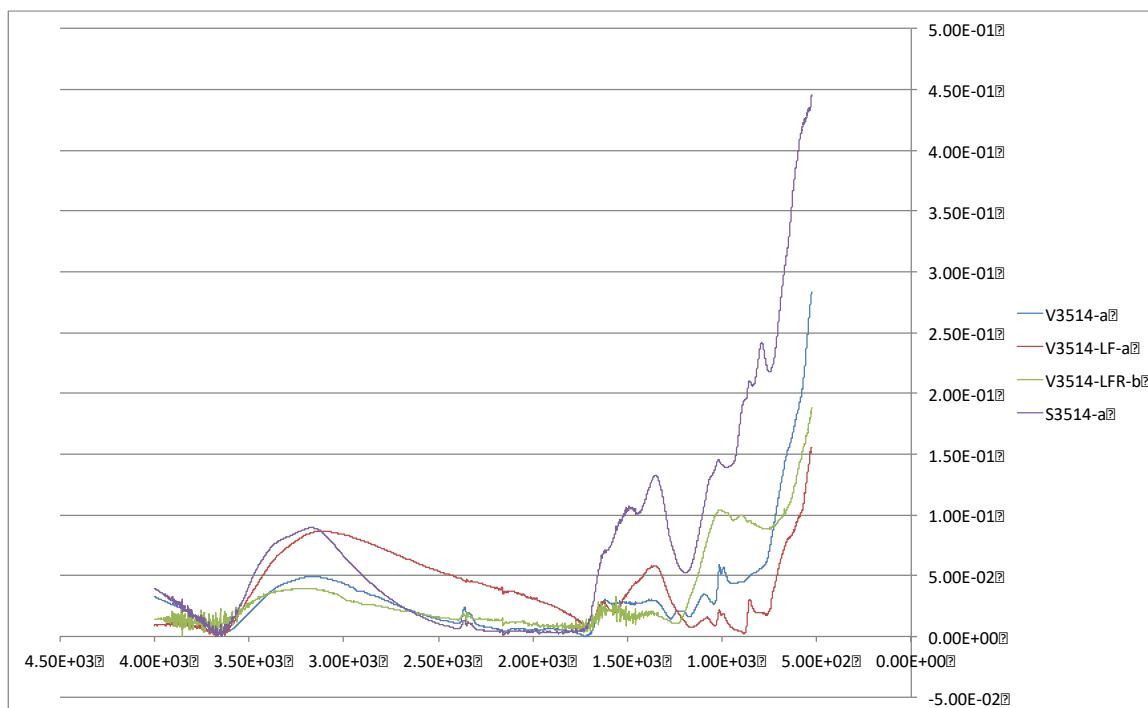


Figure 124-FTIR spectra of selected samples at 25°C and 7 days in different media.

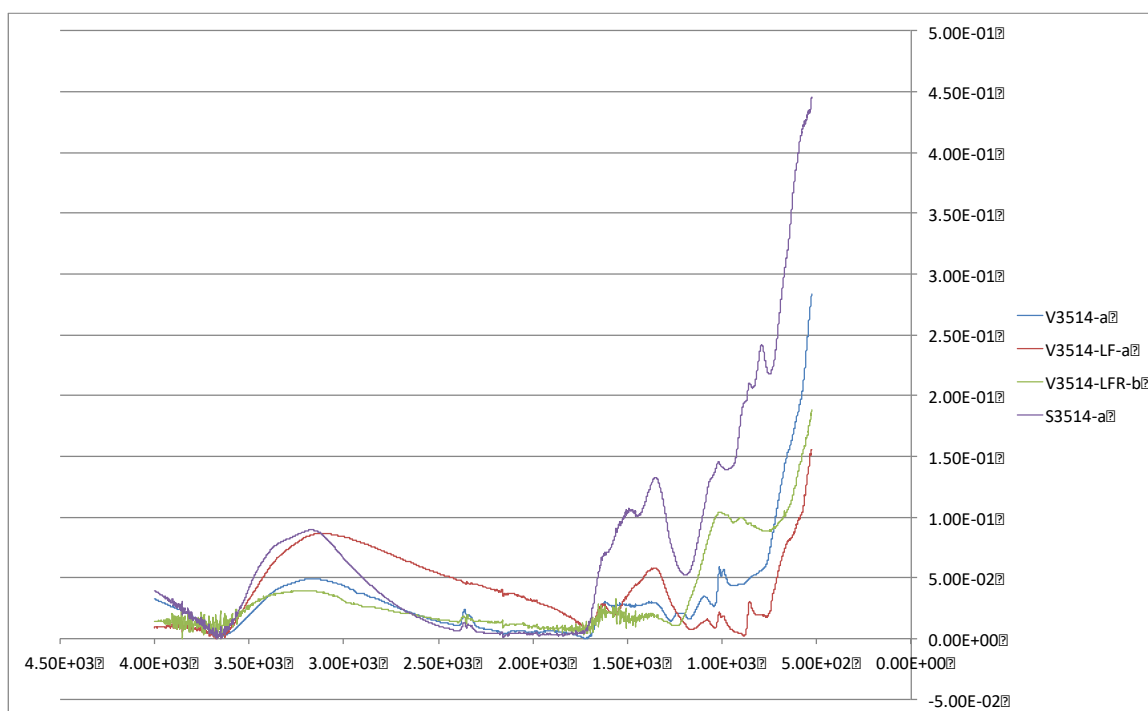


Figure 125-FTIR spectra of selected samples at 35°C and 14 days in different media.

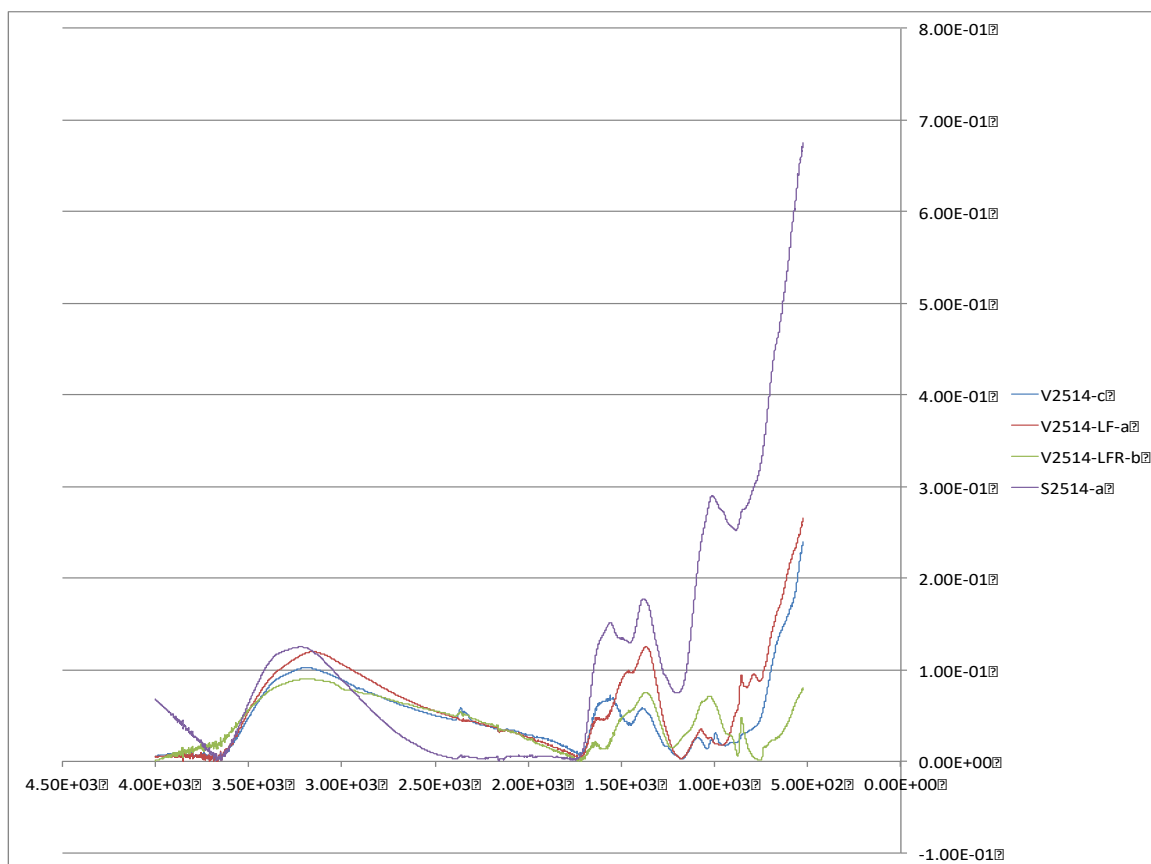


Figure 126-FTIR spectra of selected samples at 25°C and 14 days in different media.

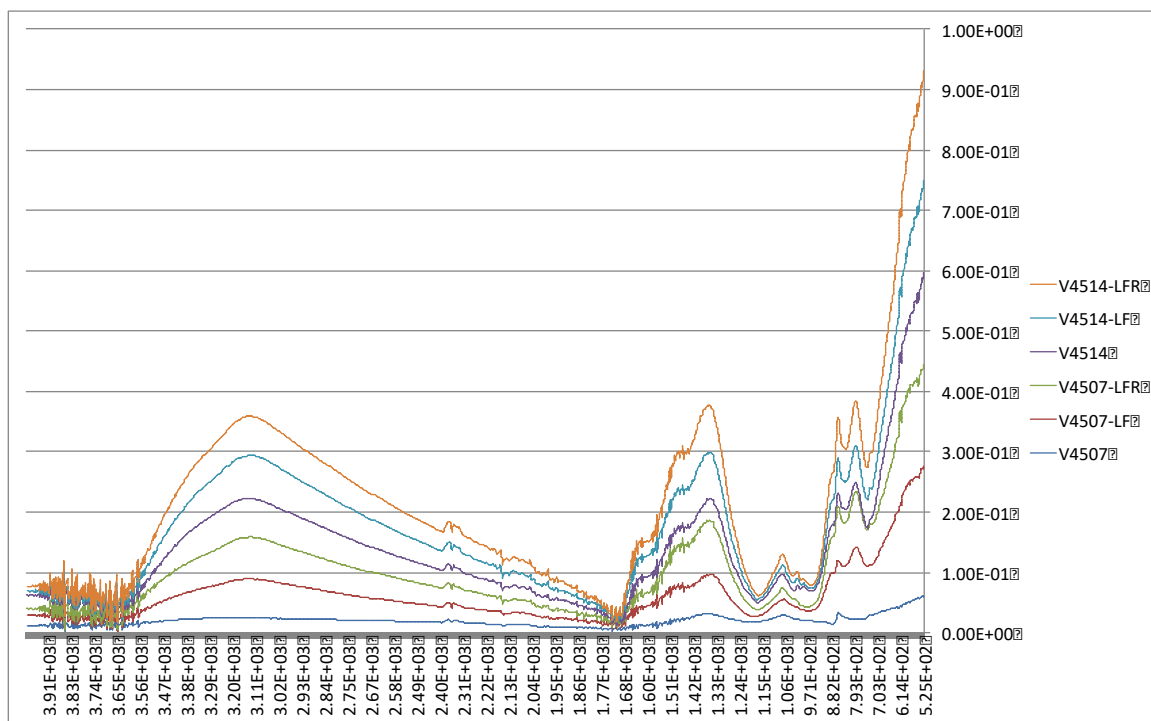


Figure 127-FTIR spectra of selected samples at 45°C days in different media.

