|  |  |  |
| --- | --- | --- |
| EH.Cr | Without atropine - percent response  | With atropine -percent response |
| Conc. | 1 |  2 | 3  | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 |
| 0.010.030.100.301.003.005.0010.00 | 100.100.100.100.90.80.40.0. | 100.100.100.100.90.80.60.0. | 100.100.100.100.100.90.40.0. | 100.100.100.100.90.80.50.0. | 100.100.100.100.95.85.40.0. | 1001001001009884450 | 1001001009080400 | 1001001009080600 | 10010010010090400 | 1001001009080400 | 1001001009580500 |

**Raw DATA of *E. hirta* on rabbit jejunum and rat ileum**

The inhibitory effect of EH.Cr against rabbit jejunum in absence and presence of atropine. n = 4-6 individual experiments using tissues of 4 to 5 different animals.

The inhibitory effect of EH.Cr against high K+ and low K+ induced contraction in jejunum. n = 4-6 individual experiments using tissues of 4 to 5 different animals.

|  |  |  |
| --- | --- | --- |
| EH.Cr | High K+ - percent response | Low K+ - percent response |
| Conc. | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 6 |
| 0.010.030.100.301.003.005.00 | 100.100. 100. 90. 60. 0. 0.  |  100.100. 100. 80. 80. 10. 0. | 10010095958070 | 100.100. 100. 85. 80. 10. 0. | 10010096957550 | 100100.90.85.80.0.0. | 1001001009060100 | 100100100806500 | 100100100865580 | 100100100806500 | 10010095876070 |

The inhibitory effect of Pet.EH against rabbit jejunum in absence and presence of atropine. n = 4-6 individual experiments using tissues of 4 to 5 different animals.

|  |  |  |
| --- | --- | --- |
| Pet.EH | Without atropine - percent response | With atropine - percent response |
| Conc. | 1 2 3 4 5 6 | 1 2 3 4 5 |
| 0.0030.0100.0300.100 | 100 100 90 100 95 10090 80 70 90 80 9570 60 60 70 70 720 0 0 0 0 0 | 95 100 100 100 10090 90 90 80 9065 65 70 60 700 0 0 0 0 |

The inhibitory effect of Pet.EH against high K+ and low K+ induced contraction in jejunum. n = 4-6 individual experiments using tissues of 4 to 5 different animals.

|  |  |  |
| --- | --- | --- |
| Pet EH | High K+  | Low K+ |
| n | 1 2 3 4 5 6 | 1 2 3 4 5 |
| 0.0010.0030.0100.0300.100 | 100 100 100 100 100 100100 100 90 100 95 9980 80 70 85 75 8270 60 60 75 65 600 0 0 0 0 0 | 100 100 100 100 10090 100 100 95 10080 90 90 85 9560 70 70 65 75 0 0 0 0 0 |

The inhibitory effect of CH3Cl.EH against rabbit jejunum in absence and presence of atropine. n = 4-6 individual experiments using tissues of 4 to 5 different animals.

|  |  |  |
| --- | --- | --- |
| CHCl3. EH | Without atropine - percent response | With atropine - percent response |
| Conc. | 1 2 3 4 5 6 | 1 2 3 4 5  |
| 0.010.030.100.301.003.00 | 100 100 100 100 100 100100 90 95 90 100 9085 75 75 75 85 8060 60 50 60 60 550 10 22 12 25 200 0 0 0 0 0 | 100 100 100 100 10095 100 95 100 9070 85 75 80 8055 65 45 60 600 10 0 5 50 0 0 0 0 |

The inhibitory effect of CH3Cl.EH against high K+ and low K+ induced contraction in jejunum. n = 4-6 individual experiments using tissues of 4 to 5 different animals.

|  |  |  |
| --- | --- | --- |
| CHCl3. EH | High K+ - percent response | Low K+ - percent response |
| Conc | 1 2 3 4 5  | 1 2 3 4 5 6  |
| 0.010.030.100.301.00 | 100 100 100 100 10095 100 100 100 8990 80 70 80 7870 50 40 45 470 0 0 0 0 | 100 100 100 100 100 100100 90 90 95 90 9280 70 80 70 75 8040 50 60 45 40 410 0 0 0 0 0 |

The inhibitory effect of Et.Ac.EH against rabbit jejunum in absence and presence of atropine. n = 4-6 individual experiments using tissues of 4 to 5 different animals.

|  |  |  |
| --- | --- | --- |
| ET.Ac.EH | With atropine - percent response | Without atropine - percent response |
| Conc | 1 2 3 4 5 6 | 1 2 3 4  |
| 0.010.030.100.301.003.005.00 | 100 100 100 100 100 100100 100 100 100 100 100100 100 100 100 100 10090 90 80 95 90 9070 70 65 70 60 6520 50 30 30 25 290 0 0 0 0 0 | 100 100 100 100100 100 100 100 100 100 90 9580 90 70 8560 80 60 700 0 0 0 |

The inhibitory effect of Et.Ac.EH against high K+ and low K+ induced contraction in jejunum. n = 4-6 individual experiments using tissues of 4 to 5 different animals.

|  |  |  |
| --- | --- | --- |
| Et.Ac.EH | High K+ - percent response | Low K+ - percent response |
| Conc. | 1 2 3 4 5 6 | 1 2 3 4  |
| 0.010.030.100.301.003.00 | 100 100 100 100 100 100100 100 100 100 100 9990 100 100 100 95 9080 90 80 80 85 7560 50 60 50 40 350 0 0 0 0 0 | 100 100 100 100100 100 90 10090 100 85 100 70 90 70 8050 60 50 700 0 0 0 |

The inhibitory effect of Aq.EH against rabbit jejunum in absence and presence of atropine. n = 4-6 individual experiments using tissues of 4 to 5 different animals.

|  |  |  |
| --- | --- | --- |
| Aq.EH | Without atropine - percent response | With atropine - percent response |
| Conc | 1 2 3 4 5 6  | 1 2 3 4 5 |
| 0.010.030.100.301.003.005.0010.00 | 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 10090 100 100 100 90 10070 100 90 100 70 9060 70 60 70 60 6030 40 40 40 30 40  | 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 90 100 100 90100 75 90 90 75 70 60 50 65 550 0 0 0 0 |

The inhibitory effect of Aq.EH against high K+ and low K+ induced contraction in jejunum. n = 4-6 individual experiments using tissues of 4 to 5 different animals.

|  |  |  |
| --- | --- | --- |
| Aq.EH | High K+ - percent response | Low K+ - percent response |
| Conc | 1 2 3 4 5 6  | 1 2 3 4  |
| 0.301.003.005.0010.00 | 100 100 100 100 100 100100 100 90 95 90 9990 90 80 85 80 8970 80 75 80 70 7860 70 70 80 60 70 | 100 100 100 100100 90 90 9590 85 80 7570 70 60 5560 70 60 55  |

**Rat Ileum Data**

Spasmogenic effects of EH.Cr on rat ileum in presence and absence of atropine. n = 4-6 individual experiments using tissues of 4 to 5 different animals.

|  |  |  |
| --- | --- | --- |
| EH.Cr | Without atropine - percent response | With atropine - percent response |
| Conc | 1 2 3 4 5 6 | 1 2 3 4  |
| Ach0.010.030.100.301.003.005.0010.00 | 100001020304000 | 100001525304500 | 100001025354500 | 100001525304500 | 10000823334200 | 1000 01020254000 | 0 0 0 00 0 0 00 0 0 00 0 0 00 0 0 0 0 0 0 00 0 0 00 0 0 00 0 0 0 |

Spasmogenic effects of EH.Cr on rat ileum in presence and absence of atropine. n = 4-6 individual experiments using tissues of 4 to 5 different animals.

|  |  |  |
| --- | --- | --- |
| CH3Cl.EH | Without atropine - percent response | With atropine - percent response |
| Conc | 1 2 3 4 5 6 | 1 2 3 4  |
| Ach0.010.030.100.301.003.005.0010.00 | 100005200000 | 1000010150000 | 100005150000 | 100007150000 | 100005180000 | 1000012200 000  | 0 0 0 00 0 0 00 0 0 00 0 0 00 0 0 0 0 0 0 00 0 0 00 0 0 00 0 0 0 |

Spasmogenic effects of Et.Ac.EH on rat ileum in presence and absence of atropine. n = 4-5 individual experiments using tissues of 4 to 5 different animals.

|  |  |  |
| --- | --- | --- |
| Et.Ac.EH | Without atropine - percent response | With atropine - percent response |
| Conc. | 1 2 3 4 5 6 | 1 2 3 4  |
| Ach0.010.030.100.301.003.005.0010.00 | 10000102040000 | 10000153045000 | 10000152045000 | 10000153045000 | 10000121742000 | 100 0 0 8 20 39 0 0 0  | 0 0 0 00 0 0 00 0 0 00 0 0 00 0 0 0 0 0 0 00 0 0 00 0 0 00 0 0 0 |

Spasmogenic effects of Aq.Cr on rat ileum in presence and absence of atropine. n = 4-5 individual experiments using tissues of 4 to 5 different animals.

|  |  |  |
| --- | --- | --- |
| Aq.EH | Without atropine - percent response | With atropine - percent response |
| Conc. | 1 2 3 4 5 | 6 | 1 2 3 4  |
| Ach0.010.030.100.301.003.005.0010.00 | 10000510206000 | 10000515207000 | 100001012257000 | 100001313257000 | 10000012186300 | 10000010176000 | 0 0 0 00 0 0 00 0 0 00 0 0 00 0 0 0 0 0 0 00 0 0 00 0 0 00 0 0 0 |

**Calcium curve**

Concentration response curves of EH.Cr on rabbit jejunum.

|  |  |  |  |
| --- | --- | --- | --- |
| Log[Ca++] | Control - percent response | EHCr[0.3mg/mL] - percent response | EHCr[1mg/mL] - percent response |
| Conc | 1 2 3 4  | 1 2 3 4 | 1 2 3 4 5 |
| -6.5-6.0-5.5-5.0-4.5-4.0-3.5-3.0-2.5-2.0 | 0 4. 8. 06. 8. 12. 910. 12. 15. 2515. 30. 33. 3030. 45. 46. 4050. 63. 65. 6870. 80. 82. 8780. 95. 90. 9090. 95. 95. 9595. 95. 95. 100 | 0. 0. 0. 00. 0. 0. 02. 4. 8. 04. 8. 12. 58. 12. 15. 10 20. 30. 33. 2535. 45. 46. 4055. 63. 65. 5975. 80. 82. 8875. 80. 82. 90 | 0. 0. 0. 0 00. 0. 0. 0 00. 0. 0. 0 00. 0. 0. 0 00. 0. 0. 0 02. 4. 8. 6 104. 8. 12. 10 158. 12. 15. 20 2520. 30. 33. 27 3035. 40. 46. 40 45 |

Concentration response curves of Pet.EH on rabbit jejunum.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Log[Ca++] | Control - percent response |  | Pet.EH [0.03mg/mL] - percent response | Pet.EH [0.1mg/mL] - percent response |
| Conc. | 1 | 2 | 3 | 4  | 1 2 3 4 | 1 2 3  |
| -6.5-6.0-5.5-5.0-4.5-4.0-3.5-3.0-2.5-2.0 | 24820355575859090 | 481230456380959595 | 8121533466582909595 | 10151830385970789095 | 000482035556060 | 0008123045637575 | 00012153346656565 | 00010183040606061 | 0 0 00 0 00 0 00 0 00 0 00 0 02 4 84 8 128 12 1515 30 30 |

Concentration response curves of CHCl3.EH on rabbit jejunum.

|  |  |  |  |
| --- | --- | --- | --- |
| Log[Ca++] | Control - percent response | EH.CHCl3[0.1mg/mL] - percent response | EH.CHCl3 [0.3mg/mL]- percent response |
| Conc. | 1 | 2 | 3 | 4  | 1 | 2 | 3  | 1 | 2 | 3 |  |
| -6.5 | 2 | 4 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| -6.0 | 4 | 6 | 12 | 10 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| -5.5 | 8 | 15 | 15 | 12 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| -5.0 | 20 | 25 | 33 | 28 | 2 | 4 | 8 | 0 | 0 | 0 |  |
| -4.5 | 35 | 40 | 46 | 30 | 4 | 8 | 12 | 0 | 0 | 0 |  |
| -4.0 | 55 | 60 | 65 | 62 | 8 | 12 | 15 | 0 | 0 | 0 |  |
| -3.5 | 75 | 85 | 82 | 80 | 20 | 30 | 33 | 2 | 4 | 8 |  |
| -3.0 | 85 | 95 | 90 | 96 | 35 | 45 | 46 | 4 | 8 | 12 |  |
| -2.5 | 90 | 95 | 95 | 98 | 50 | 60 | 58 | 8 | 12 | 15 |  |
| -2.0 | 90 | 95 | 95 | 98 | 60 | 65 | 63 | 20 | 28 | 33 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |

Concentration response curves of Et.Ac.EH on rabbit jejunum.

|  |  |  |  |
| --- | --- | --- | --- |
| Log[Ca++] | Control - percent response | EtAt.EH [0.3mg/mL] - percent response | Et.At.EH [1mg/mL] - percent response |
| Conc | 1 | 2 |  | 3  | 1 | 2 | 3  | 1 | 2 | 3  |
| -6.5-6.0-5.5-5.0-4.5-4.0-3.5-3.0-2.5-2.0 | 24820355575859090 | 481230456380959595 | 6101235406085909090 |  | 002481830456070 | 0048122640556680 | 00812153546606875 | 00000024820 | 000000481225 | 0000008121533 |

Concentration response curves of Quercetin on rabbit jejunum.

|  |  |  |  |
| --- | --- | --- | --- |
| Log[Ca++] | Control - percent response | Quercetin[3 µM] - percent response | Quercetin [10 µM] - percent response |
| Conc. | 1 | 2 | 3  | 1 | 2 | 3 | 4 | 1 | 2 | 3  |
| -6.5-6.0-5.5-5.0-4.5-4.0-3.5-3.0-2.5-2.0 | 24820355575859090 | 461025406075909095 | 8121533466582909595 | 002482035557575 | 000481230456380 | 0.068102535456060 | 001012152933406075 | 000002481525 | 00004812203040 | 0000048102030 |

Concentration response curves of Nifedipine on rabbit jejunum.

|  |  |  |  |
| --- | --- | --- | --- |
| Log[Ca++] | Control | Nifedipine[0.1µM] | Nifedipine[0.3µM] |
| n | 1 | 2 3 4  | 1 2 3  | 1 2 3  |
| -6.5-6.0-5.5-5.0-4.5-4.0-3.5-3.0-2.5-2.0 | 26815305070808590 | 481230456380959595 | 8 1012 1515 1933 2546 3565 4082 8590 9095 9595 99 | 0 0 00 0 02 4 84 6 1010 12 1515 20 2530 25 3540 30 4045 40 5045 40 50 | 0 0 00 0 00 0 00 0 00 2 84 6 104 8 1215 10 2120 25 2525 25 25 |