

```
lilylane@Lilys-MacBook-Pro-2 ~ % cd CS3200_P2_Queries
lilylane@Lilys-MacBook-Pro-2 CS3200_P2_Queries % npm start
> cs3200_p2_queries@1.0.0 start
> node app.js
```

Example app listening on port 3001!

mongo connected

Farm queries: 4

Top yielding crops: [

```
{
  _id: 'Oranges',
  farms: [
    [Object], [Object],
    [Object], [Object],
    [Object], [Object],
    [Object], [Object],
    [Object]
  ]
},
{
  _id: 'Green onions (Scallions)',
  farms: [
    [Object], [Object],
    [Object], [Object],
    [Object], [Object],
    [Object], [Object],
    [Object], [Object],
    [Object], [Object],
    [Object], [Object],
    [Object]
  ]
},
{
  _id: 'Navy beans',
  farms: [
    [Object], [Object],
    [Object], [Object],
    [Object], [Object],
    [Object], [Object],
    [Object], [Object]
  ]
}
]
```

Count of farms with Precision Agriculture analysts: [ { 'Farms with Precision Agriculture analysts': 46 } ]

Averages for each disease: [

```
{
  _id: 'Fusarium crown rot',
  farms: [
    27, 63, 75, 212, 220,
    222, 295, 310, 316, 319,
    549, 550, 656, 688, 691,
    915, 992
  ],
  avgLocation: 19.902391647058824,
  avgHumidity: 0.48117647058823526,
  avgWaterSaturation: 0.4626470588235294
},
{
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    _id: 'Bean common mosaic virus',
    farms: [
      30, 66, 231, 296, 308,
      412, 454, 488, 580, 635,
      640, 703, 731, 735, 845,
      889, 958, 972
    ],
    avgLocation: 11.963700116666665,
    avgHumidity: 0.5248333333333333,
    avgWaterSaturation: 0.6188888888888889
  },
  {
    _id: 'Angular leaf spot',
    farms: [
      39, 59, 148, 179, 192,
      265, 349, 360, 374, 470,
      547, 594, 649, 811, 824,
      829, 863, 957, 973, 987
    ],
    avgLocation: 22.452221665,
    avgHumidity: 0.54895,
    avgWaterSaturation: 0.4551
  },
  {
    _id: 'Wilt',
    farms: [
      131, 182, 272,
      508, 565, 843,
      899, 968, 997
    ],
    avgLocation: 27.19185431111111,
    avgHumidity: 0.3268888888888889,
    avgWaterSaturation: 0.5151111111111111
  },
  {
    _id: 'Citrus greening (Huanglongbing)',
    farms: [
      5, 111, 154, 163,
      334, 406, 611, 741,
      837, 945
    ],
    avgLocation: 13.169277349999998,
    avgHumidity: 0.6211,
    avgWaterSaturation: 0.615
  },
  {
    _id: 'Verticillium wilt of cotton',
    farms: [
      103, 258, 592,
      685, 793, 938,
      948
    ],
    avgLocation: 28.199450671428572,
    avgHumidity: 0.4877142857142857,
    avgWaterSaturation: 0.5198571428571429
  },
  {

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    _id: 'Blight',
    farms: [
      11, 32, 45, 67, 191, 263,
      282, 336, 430, 512, 581, 645,
      680, 866, 936, 943, 970, 982,
      984, 990
    ],
    avgLocation: 24.623617245,
    avgHumidity: 0.5458999999999999,
    avgWaterSaturation: 0.4205
  },
  {
    _id: 'Leaf rust',
    farms: [
      28, 44, 186, 200,
      264, 461, 575, 862
    ],
    avgLocation: 34.848152937500004,
    avgHumidity: 0.60925,
    avgWaterSaturation: 0.58625
  },
  {
    _id: 'Rhizoctonia damping-off',
    farms: [
      133, 145, 233, 247,
      251, 435, 602, 616,
      624, 781, 905, 920,
      980
    ],
    avgLocation: 37.16961526153846,
    avgHumidity: 0.6304615384615384,
    avgWaterSaturation: 0.4948461538461538
  },
  {
    _id: 'Root rot',
    farms: [
      134, 142, 149, 206,
      230, 252, 283, 322,
      540, 598, 932
    ],
    avgLocation: 35.042834072727274,
    avgHumidity: 0.554,
    avgWaterSaturation: 0.5987272727272728
  },
  {
    _id: 'Clubroot',
    farms: [
      19, 155, 216, 277,
      457, 478, 614, 674,
      812, 859, 976
    ],
    avgLocation: 29.960896963636365,
    avgHumidity: 0.6075454545454545,
    avgWaterSaturation: 0.349
  },
  {
    _id: 'Root knot nematode',

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farms: [
  156, 238, 300, 368,
  622, 630, 644, 817,
  890, 901, 986
],
avgLocation: 26.454850054545453,
avgHumidity: 0.5132727272727272,
avgWaterSaturation: 0.4379090909090909
},
{
  _id: 'Mosaic',
  farms: [
    102, 128, 185, 228,
    257, 259, 385, 399,
    424, 471, 599, 800,
    839, 851, 860, 951
  ],
  avgLocation: 23.61939451875,
  avgHumidity: 0.4670625,
  avgWaterSaturation: 0.4285
},
{
  _id: 'Citrus tristeza virus',
  farms: [
    69, 124, 152, 364,
    428, 574, 633, 638,
    747, 806, 816, 835
  ],
  avgLocation: 22.821977175,
  avgHumidity: 0.7264166666666667,
  avgWaterSaturation: 0.38841666666666663
},
{
  _id: 'Scab',
  farms: [
    37, 76, 82, 108, 123, 175,
    297, 392, 494, 567, 600, 766,
    820, 840, 841, 844, 870, 886,
    952, 955
  ],
  avgLocation: 16.101427805,
  avgHumidity: 0.5151,
  avgWaterSaturation: 0.4284
},
{
  _id: 'Leaf curl',
  farms: [
    9, 62, 71, 73, 187, 189,
    302, 329, 353, 415, 462, 477,
    503, 506, 517, 569, 740, 821,
    830, 928, 963
  ],
  avgLocation: 21.41718210952381,
  avgHumidity: 0.4906666666666667,
  avgWaterSaturation: 0.4473809523809524
},
{
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    _id: 'Potato wart disease',
    farms: [
      68, 95, 118, 150, 340,
      405, 427, 460, 475, 584,
      670, 683, 696, 787, 884,
      908
    ],
    avgLocation: 16.997836831249998,
    avgHumidity: 0.469125,
    avgWaterSaturation: 0.670625
  },
  {
    _id: 'Virus blight',
    farms: [
      40, 84, 86, 165, 523,
      528, 587, 676, 726, 788,
      831, 873, 962, 993
    ],
    avgLocation: 14.84050495,
    avgHumidity: 0.45407142857142857,
    avgWaterSaturation: 0.3419285714285714
  },
  {
    _id: 'Rice blast',
    farms: [
      70, 303, 371, 463,
      505, 651, 658, 772,
      798, 834, 909, 930
    ],
    avgLocation: 15.960019858333334,
    avgHumidity: 0.3721666666666667,
    avgWaterSaturation: 0.4794166666666667
  },
  {
    _id: 'Phytophthora blight',
    farms: [
      6, 20, 144, 153, 174,
      214, 256, 273, 290, 309,
      376, 394, 466, 522, 838,
      903, 911, 989, 1000
    ],
    avgLocation: 25.917654163157895,
    avgHumidity: 0.49200000000000005,
    avgWaterSaturation: 0.3950526315789474
  },
  {
    _id: 'Bean yellow mosaic virus',
    farms: [
      3, 7, 13, 17, 94, 107,
      225, 323, 403, 450, 570, 571,
      667, 672, 690, 692, 832, 883,
      887, 893, 924
    ],
    avgLocation: 16.44643442857143,
    avgHumidity: 0.4413809523809524,
    avgWaterSaturation: 0.5657142857142856
  },

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{
  _id: 'Powdery mildew',
  farms: [
    140, 204, 205, 313,
    434, 444, 561, 586,
    617, 660, 733, 867,
    946
  ],
  avgLocation: 18.67493440769231,
  avgHumidity: 0.5199230769230769,
  avgWaterSaturation: 0.46953846153846157
},
{
  _id: 'Fusarium wilt of tomato',
  farms: [
    226, 260, 339, 345,
    359, 453, 525, 665,
    671, 707, 721, 746,
    808, 959
  ],
  avgLocation: 17.6645376,
  avgHumidity: 0.41571428571428576,
  avgWaterSaturation: 0.3670714285714286
},
{
  _id: 'Black spot',
  farms: [
    14, 50, 119, 139,
    481, 648, 709, 759,
    818, 865, 882
  ],
  avgLocation: 27.98277107272727,
  avgHumidity: 0.5613636363636364,
  avgWaterSaturation: 0.6642727272727273
},
{
  _id: 'Ring spot',
  farms: [
    176, 245, 382, 416,
    515, 530, 780, 799,
    902, 947
  ],
  avgLocation: 37.83561279,
  avgHumidity: 0.4614,
  avgWaterSaturation: 0.6990999999999999
},
{
  _id: 'Bacterial canker',
  farms: [
    51, 65, 190, 208, 250,
    305, 400, 495, 641, 659,
    694, 704, 761, 879, 921,
    929, 961
  ],
  avgLocation: 19.38493803529412,
  avgHumidity: 0.5209411764705882,
  avgWaterSaturation: 0.49305882352941177
}

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},
{
  _id: 'Beet curly top virus',
  farms: [
    2, 106, 293, 326,
    668, 717, 742, 881,
    892, 964
  ],
  avgLocation: 32.84217792,
  avgHumidity: 0.4808,
  avgWaterSaturation: 0.5044000000000001
},
{
  _id: 'Bacterial blight',
  farms: [
    57, 274, 346, 393,
    447, 513, 516, 750,
    758, 868
  ],
  avgLocation: 22.215726699999998,
  avgHumidity: 0.5005,
  avgWaterSaturation: 0.4822
},
{
  _id: 'Crown gall',
  farms: [
    127, 130, 193, 337, 380,
    390, 404, 482, 497, 499,
    511, 578, 609, 646, 653,
    732, 804, 857, 876, 922,
    944, 999
  ],
  avgLocation: 23.304836563636364,
  avgHumidity: 0.520909090909091,
  avgWaterSaturation: 0.5640909090909091
},
{
  _id: 'Stunt',
  farms: [
    15, 64, 298, 333, 348,
    418, 431, 445, 559, 582,
    727, 853, 869, 927, 975,
    977
  ],
  avgLocation: 24.681934525,
  avgHumidity: 0.4488125,
  avgWaterSaturation: 0.527625
},
{
  _id: 'Septoria leaf spot',
  farms: [
    46, 210, 240, 314,
    425, 439, 577, 715,
    730, 823, 994
  ],
  avgLocation: 25.20490381818182,
  avgHumidity: 0.6588181818181819,

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    avgWaterSaturation: 0.5009090909090909
  },
  {
    _id: 'Bacterial spot',
    farms: [
      35, 56, 177, 328, 338,
      366, 367, 419, 448, 455,
      526, 532, 620, 706, 743,
      796, 842, 864
    ],
    avgLocation: 24.543082672222223,
    avgHumidity: 0.5511111111111111,
    avgWaterSaturation: 0.3650555555555555
  },
  {
    _id: 'Leaf smut',
    farms: [
      21, 114, 384, 483,
      539, 605, 634, 636,
      768, 801
    ],
    avgLocation: 30.54172544,
    avgHumidity: 0.6071,
    avgWaterSaturation: 0.5023
  },
  {
    _id: 'Southern blight',
    farms: [
      104, 129, 249, 327, 357,
      397, 421, 519, 590, 610,
      655, 698, 728, 763, 822,
      874, 954, 971
    ],
    avgLocation: 24.727559483333334,
    avgHumidity: 0.5285555555555556,
    avgWaterSaturation: 0.6673888888888889
  },
  {
    _id: 'Meloidogyne (Root-knot nematodes)',
    farms: [
      98, 178, 229,
      533, 693, 744,
      917, 979
    ],
    avgLocation: 34.681733875,
    avgHumidity: 0.602625,
    avgWaterSaturation: 0.515
  },
  {
    _id: 'Cercospora leaf spot',
    farms: [
      34, 199, 218, 268, 351,
      356, 429, 440, 500, 514,
      576, 613, 912, 934, 949
    ],
    avgLocation: 22.511910833333333,
    avgHumidity: 0.4922,

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    avgWaterSaturation: 0.4848666666666667
  },
  {
    _id: 'Brown spot',
    farms: [
      141, 170, 188, 203,
      207, 209, 285, 388,
      472, 664, 736, 739,
      776, 849, 900, 981
    ],
    avgLocation: 17.73800631875,
    avgHumidity: 0.3918125,
    avgWaterSaturation: 0.3144375
  },
  {
    _id: 'Fusarium head blight',
    farms: [
      88, 143, 184, 395,
      409, 446, 724, 789,
      916, 969
    ],
    avgLocation: 17.02483277,
    avgHumidity: 0.6376999999999999,
    avgWaterSaturation: 0.434
  },
  {
    _id: 'Verticillium wilt of eggplant',
    farms: [
      8, 137, 158, 270, 417,
      464, 489, 566, 629, 650,
      708, 720, 753, 797, 827,
      858, 897
    ],
    avgLocation: 23.838595982352942,
    avgHumidity: 0.5312941176470588,
    avgWaterSaturation: 0.5266470588235294
  },
  {
    _id: 'Late blight',
    farms: [
      146, 195, 217, 278,
      311, 330, 350, 381,
      411, 449, 456, 498,
      625, 699, 756, 861
    ],
    avgLocation: 24.5998431,
    avgHumidity: 0.3199375,
    avgWaterSaturation: 0.678375
  },
  {
    _id: 'Verticillium wilt of pepper',
    farms: [
      164, 172, 180, 198,
      236, 254, 321, 369,
      422, 432, 438, 458,
      907, 942
    ],
  },

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    avgLocation: 31.925517842857143,
    avgHumidity: 0.4112857142857143,
    avgWaterSaturation: 0.4787142857142857
  },
  {
    _id: 'Fusarium root rot',
    farms: [
      26, 33, 52, 171, 358,
      362, 398, 468, 535, 555,
      669, 855, 856, 974
    ],
    avgLocation: 20.978904550000003,
    avgHumidity: 0.521,
    avgWaterSaturation: 0.5307857142857143
  },
  {
    _id: 'Damping-off',
    farms: [
      31, 36, 211, 420,
      626, 738, 751, 785,
      803, 807
    ],
    avgLocation: 39.939555569999996,
    avgHumidity: 0.6755,
    avgWaterSaturation: 0.3628
  },
  {
    _id: 'Rhizoctonia root rot',
    farms: [
      25, 55, 202, 332,
      354, 373, 387, 689,
      956
    ],
    avgLocation: 30.69205928888889,
    avgHumidity: 0.48844444444444446,
    avgWaterSaturation: 0.3958888888888889
  },
  {
    _id: 'Sclerotinia rot',
    farms: [
      79, 90, 169, 227,
      452, 601, 757, 810,
      940, 985
    ],
    avgLocation: 29.113928950000002,
    avgHumidity: 0.5985,
    avgWaterSaturation: 0.5947
  },
  {
    _id: 'Potato virus Y',
    farms: [
      16, 24, 115, 167,
      266, 269, 289, 361,
      423, 441, 521, 748,
      752
    ],
    avgLocation: 24.464616376923075,

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    avgHumidity: 0.49669230769230766,
    avgWaterSaturation: 0.6313076923076923
  },
  {
    _id: 'Smut',
    farms: [
      74, 117, 281, 335,
      372, 401, 451, 562,
      612, 615, 666, 679,
      960
    ],
    avgLocation: 28.98707896923077,
    avgHumidity: 0.46361538461538465,
    avgWaterSaturation: 0.47107692307692306
  },
  {
    _id: 'Tomato yellow leaf curl virus',
    farms: [
      105, 116, 183,
      370, 583, 591,
      769, 826, 846
    ],
    avgLocation: 29.018453655555554,
    avgHumidity: 0.31166666666666665,
    avgWaterSaturation: 0.6413333333333333
  },
  {
    _id: 'Rice sheath blight',
    farms: [
      38, 61, 162, 331,
      493, 632, 737, 754,
      871, 906, 950
    ],
    avgLocation: 29.463430518181816,
    avgHumidity: 0.4717272727272727,
    avgWaterSaturation: 0.4606363636363637
  },
  {
    _id: 'Fusarium wilt',
    farms: [
      60, 267, 437, 469,
      476, 553, 564, 596,
      621, 662, 710, 782,
      925, 996
    ],
    avgLocation: 31.72452869285714,
    avgHumidity: 0.3349285714285714,
    avgWaterSaturation: 0.4802142857142857
  },
  {
    _id: 'Verticillium wilt',
    farms: [
      109, 138, 215, 465,
      538, 541, 657, 684,
      697, 702, 705, 729,
      850, 885, 914, 965
    ],
  },

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    avgLocation: 16.73915896875,
    avgHumidity: 0.5609375,
    avgWaterSaturation: 0.429875
  },
  {
    _id: 'Dieback',
    farms: [
      96, 99, 122, 147,
      224, 248, 271, 407,
      426, 618, 654, 774
    ],
    avgLocation: 31.965037125,
    avgHumidity: 0.56975,
    avgWaterSaturation: 0.5874166666666666
  },
  {
    _id: 'Alternaria leaf spot',
    farms: [
      132, 160, 288,
      383, 479, 623,
      778, 872
    ],
    avgLocation: 34.9748364375,
    avgHumidity: 0.4965,
    avgWaterSaturation: 0.314625
  },
  {
    _id: 'Anthracnose',
    farms: [
      12, 83, 304, 306, 341,
      504, 510, 663, 712, 723,
      749, 770, 773, 791, 923
    ],
    avgLocation: 19.822294033333332,
    avgHumidity: 0.45380000000000004,
    avgWaterSaturation: 0.46033333333333337
  },
  {
    _id: 'Curly top virus',
    farms: [ 47, 181, 307, 501, 589, 935 ],
    avgLocation: 30.646690466666666,
    avgHumidity: 0.37766666666666665,
    avgWaterSaturation: 0.28366666666666667
  },
  {
    _id: 'Potato late blight',
    farms: [
      48, 54, 72, 232,
      275, 291, 558, 686,
      687, 790, 978
    ],
    avgLocation: 24.07703039090909,
    avgHumidity: 0.38272727272727275,
    avgWaterSaturation: 0.514
  },
  {
    _id: 'Botrytis rot',

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```
farms: [
  10, 110, 262, 347,
  396, 560, 718, 819,
  854
],
avgLocation: 42.3764076,
avgHumidity: 0.5624444444444445,
avgWaterSaturation: 0.41700000000000004
},
{
  _id: 'Anthracnose fruit rot',
  farms: [
    18, 42, 49, 53, 120,
    201, 527, 606, 637, 681,
    700, 745, 926
  ],
  avgLocation: 26.441459846153847,
  avgHumidity: 0.5188461538461538,
  avgWaterSaturation: 0.5368461538461539
},
{
  _id: 'Gray mold',
  farms: [
    100, 151, 166, 318,
    443, 490, 568, 642,
    711, 716, 762, 891,
    941, 967
  ],
  avgLocation: 27.279227892857143,
  avgHumidity: 0.4883571428571428,
  avgWaterSaturation: 0.47000000000000003
},
{
  _id: 'Stripe rust',
  farms: [
    92, 161, 239, 294, 299,
    324, 408, 485, 502, 529,
    588, 722, 836, 875, 904,
    998
  ],
  avgLocation: 23.11404480625,
  avgHumidity: 0.6208125,
  avgWaterSaturation: 0.5005
},
{
  _id: 'Wheat leaf rust',
  farms: [
    97, 223, 234, 241,
    284, 312, 379, 556,
    675, 983, 991
  ],
  avgLocation: 19.349283127272727,
  avgHumidity: 0.5356363636363637,
  avgWaterSaturation: 0.36327272727272725
},
{
  _id: 'Citrus canker',
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farms: [
  23, 173, 375, 459,
  480, 544, 572, 595,
  604, 682, 825
],
avgLocation: 17.609454854545454,
avgHumidity: 0.3710909090909091,
avgWaterSaturation: 0.4119090909090909
},
{
  _id: 'White mold',
  farms: [ 126, 486, 579, 678, 794, 937 ],
  avgLocation: 23.007492466666665,
  avgHumidity: 0.657,
  avgWaterSaturation: 0.6711666666666667
},
{
  _id: 'Brown rot',
  farms: [
    85, 244, 315, 524,
    607, 639, 783, 784,
    919
  ],
  avgLocation: 28.956049711111113,
  avgHumidity: 0.4677777777777778,
  avgWaterSaturation: 0.5161111111111112
},
{
  _id: 'Downy mildew',
  farms: [
    159, 196, 235, 237,
    253, 292, 342, 355,
    389, 473, 546, 557,
    695, 813, 910, 995
  ],
  avgLocation: 21.24519205,
  avgHumidity: 0.3943125,
  avgWaterSaturation: 0.5394375
},
{
  _id: 'Verticillium wilt of potato',
  farms: [
    77, 89, 135, 496,
    507, 552, 603, 643,
    779, 896, 939, 953
  ],
  avgLocation: 23.06225364166667,
  avgHumidity: 0.49675,
  avgWaterSaturation: 0.5750833333333333
},
{
  _id: 'Necrosis',
  farms: [
    344, 352, 410, 474,
    509, 573, 619, 631,
    701, 802, 814, 988
  ],

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    avgLocation: 24.385631675,
    avgHumidity: 0.5028333333333334,
    avgWaterSaturation: 0.3844166666666667
  },
  {
    _id: 'Rust',
    farms: [
      22, 58, 81, 286,
      608, 777, 786, 847,
      918, 966
    ],
    avgLocation: 21.26101388,
    avgHumidity: 0.4707,
    avgWaterSaturation: 0.6529
  },
  {
    _id: 'Crown gall disease',
    farms: [
      125, 325, 484, 551,
      554, 597, 760, 764,
      767, 792, 795, 809,
      877, 933
    ],
    avgLocation: 16.995035607142857,
    avgHumidity: 0.5585,
    avgWaterSaturation: 0.5582142857142857
  },
  {
    _id: 'Crown rot',
    farms: [
      80, 91, 93, 219, 243,
      261, 363, 378, 386, 391,
      442, 467, 543, 545, 628,
      652, 815, 833, 894
    ],
    avgLocation: 14.02958010526316,
    avgHumidity: 0.443,
    avgWaterSaturation: 0.5362105263157895
  },
  {
    _id: 'Sooty mold',
    farms: [
      29, 87, 136, 280, 343,
      402, 413, 436, 534, 537,
      585, 673, 734, 755, 765,
      888, 898
    ],
    avgLocation: 24.578075176470588,
    avgHumidity: 0.5008823529411766,
    avgWaterSaturation: 0.533
  },
  {
    _id: 'Grapevine leafroll disease',
    farms: [
      4, 41, 101, 365, 414,
      536, 593, 677, 719, 771,
      852, 878, 895, 913, 931
    ]
  }

```

```

    ],
    avgLocation: 31.523883013333332,
    avgHumidity: 0.5106666666666667,
    avgWaterSaturation: 0.5479333333333333
  },
  {
    _id: 'Yellow dwarf',
    farms: [
      43, 78, 112, 194, 197,
      246, 317, 491, 548, 563,
      661, 725, 775, 848, 880
    ],
    avgLocation: 19.575502733333334,
    avgHumidity: 0.5457333333333333,
    avgWaterSaturation: 0.428
  },
  {
    _id: 'Leaf blight',
    farms: [
      113, 121, 157, 168, 221,
      242, 255, 276, 287, 301,
      487, 492, 520, 531, 542,
      627, 828
    ],
    avgLocation: 26.698094947058824,
    avgHumidity: 0.4043529411764706,
    avgWaterSaturation: 0.5459411764705883
  },
  {
    _id: 'Rot',
    farms: [
      1, 213, 279, 320,
      377, 433, 518, 647,
      713, 714, 805
    ],
    avgLocation: 11.36945530909091,
    avgHumidity: 0.5423636363636364,
    avgWaterSaturation: 0.45072727272727275
  }
]

```

Update result: [

```

{
  _id: new ObjectId('66147b9edf8402a3bf997905'),
  farm_id: 12,
  solution_id: {
    solution_id: 12,
    insight_id: [Object],
    visualization_id: [Object],
    information: 'c0e994d626d940a01e4f31fd175c22d103697c2d',
    user_id: [Object]
  },
  factors_id: {
    factors_id: 12,
    coverage_id: [Object],
    moisture_id: [Object],
    humidity_id: [Object],
    time: '10:08 AM'
  }
}

```



```

},
region_id: {
  region_id: 12,
  soilType_id: [Object],
  climate_id: [Object],
  location: 39.495941
},
crop_id: {
  crop_id: 12,
  Name: 'Jicama',
  Requirements: null,
  health_id: [Object],
  yield_id: [Object],
  location: 34.10885
}
},
{
  _id: new ObjectId('66147b9edf8402a3bf997929'),
  farm_id: 48,
  solution_id: {
    solution_id: 48,
    insight_id: [Object],
    visualization_id: [Object],
    information: '9da4075ea75cdd63a193db5240d4f573d5e4982b',
    user_id: [Object]
  },
  factors_id: {
    factors_id: 48,
    coverage_id: [Object],
    moisture_id: [Object],
    humidity_id: [Object],
    time: '10:08 AM'
  },
  region_id: {
    region_id: 48,
    soilType_id: [Object],
    climate_id: [Object],
    location: 7.4368244
  },
  crop_id: {
    crop_id: 48,
    Name: 'Swiss chard',
    Requirements: null,
    health_id: [Object],
    yield_id: [Object],
    location: 34.7299999
  }
},
{
  _id: new ObjectId('66147b9edf8402a3bf997932'),
  farm_id: 57,
  solution_id: {
    solution_id: 57,
    insight_id: [Object],
    visualization_id: [Object],
    information: '120deaae7ecc865b21759156672fe488cc7b3b26',
    user_id: [Object]
  },

```

```

},
factors_id: {
  factors_id: 57,
  coverage_id: [Object],
  moisture_id: [Object],
  humidity_id: [Object],
  time: '10:08 AM'
},
region_id: {
  region_id: 57,
  soilType_id: [Object],
  climate_id: [Object],
  location: -13.2664976
},
crop_id: {
  crop_id: 57,
  Name: 'Chickpeas (Garbanzo beans)',
  Requirements: null,
  health_id: [Object],
  yield_id: [Object],
  location: 34.746611
}
},
{
  _id: new ObjectId('66147b9edf8402a3bf997937'),
  farm_id: 62,
  solution_id: {
    solution_id: 62,
    insight_id: [Object],
    visualization_id: [Object],
    information: 'b0f96f09df7d5f67f22621e786bad69c1556d93a',
    user_id: [Object]
  },
  factors_id: {
    factors_id: 62,
    coverage_id: [Object],
    moisture_id: [Object],
    humidity_id: [Object],
    time: '10:08 AM'
  },
  region_id: {
    region_id: 62,
    soilType_id: [Object],
    climate_id: [Object],
    location: -6.4024844
  },
  crop_id: {
    crop_id: 62,
    Name: 'Eggplant',
    Requirements: null,
    health_id: [Object],
    yield_id: [Object],
    location: 34.513586
  }
},
{
  _id: new ObjectId('66147b9edf8402a3bf9979c8'),

```

```

farm_id: 207,
solution_id: {
  solution_id: 207,
  insight_id: [Object],
  visualization_id: [Object],
  information: '6db6b5d4c92e12fcc5f181c7cebf51811763315f',
  user_id: [Object]
},
factors_id: {
  factors_id: 207,
  coverage_id: [Object],
  moisture_id: [Object],
  humidity_id: [Object],
  time: '10:08 AM'
},
region_id: {
  region_id: 207,
  soilType_id: [Object],
  climate_id: [Object],
  location: 39.9368237
},
crop_id: {
  crop_id: 207,
  Name: 'Celery',
  Requirements: null,
  health_id: [Object],
  yield_id: [Object],
  location: 34.7671945
}
},
{
  _id: new ObjectId('66147b9edf8402a3bf9979e2'),
  farm_id: 233,
  solution_id: {
    solution_id: 233,
    insight_id: [Object],
    visualization_id: [Object],
    information: '2ec534a5f4f7b088dd05cbc73e9b32f56d61aab7',
    user_id: [Object]
  },
  factors_id: {
    factors_id: 233,
    coverage_id: [Object],
    moisture_id: [Object],
    humidity_id: [Object],
    time: '10:08 AM'
  },
  region_id: {
    region_id: 233,
    soilType_id: [Object],
    climate_id: [Object],
    location: 16.7621977
  },
  crop_id: {
    crop_id: 233,
    Name: 'Navy beans',
    Requirements: null,

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    health_id: [Object],
    yield_id: [Object],
    location: 34.158997
  }
},
{
  _id: new ObjectId('66147b9edf8402a3bf9979f5'),
  farm_id: 252,
  solution_id: {
    solution_id: 252,
    insight_id: [Object],
    visualization_id: [Object],
    information: '54185880a3c426895ac894459abb09e4aec36e13',
    user_id: [Object]
  },
  factors_id: {
    factors_id: 252,
    coverage_id: [Object],
    moisture_id: [Object],
    humidity_id: [Object],
    time: '10:08 AM'
  },
  region_id: {
    region_id: 252,
    soilType_id: [Object],
    climate_id: [Object],
    location: -7.6323091
  },
  crop_id: {
    crop_id: 252,
    Name: 'Peaches',
    Requirements: null,
    health_id: [Object],
    yield_id: [Object],
    location: 34.5750415
  }
},
{
  _id: new ObjectId('66147b9edf8402a3bf997a9d'),
  farm_id: 420,
  solution_id: {
    solution_id: 420,
    insight_id: [Object],
    visualization_id: [Object],
    information: 'f996e263eeb1b9f280d947b28ba19aaa68d203ea',
    user_id: [Object]
  },
  factors_id: {
    factors_id: 420,
    coverage_id: [Object],
    moisture_id: [Object],
    humidity_id: [Object],
    time: '10:08 AM'
  },
  region_id: {
    region_id: 420,
    soilType_id: [Object],

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    climate_id: [Object],
    location: 30.7
  },
  crop_id: {
    crop_id: 420,
    Name: 'Escarole',
    Requirements: null,
    health_id: [Object],
    yield_id: [Object],
    location: 34.7294592
  }
},
{
  _id: new ObjectId('66147b9edf8402a3bf997acf'),
  farm_id: 470,
  solution_id: {
    solution_id: 470,
    insight_id: [Object],
    visualization_id: [Object],
    information: 'ee7791da5bbf5698f065ee8b43b9bb0019ee9d3f',
    user_id: [Object]
  },
  factors_id: {
    factors_id: 470,
    coverage_id: [Object],
    moisture_id: [Object],
    humidity_id: [Object],
    time: '10:08 AM'
  },
  region_id: {
    region_id: 470,
    soilType_id: [Object],
    climate_id: [Object],
    location: 33.570769
  },
  crop_id: {
    crop_id: 470,
    Name: 'Safflower',
    Requirements: null,
    health_id: [Object],
    yield_id: [Object],
    location: 34.379742
  }
},
{
  _id: new ObjectId('66147b9edf8402a3bf997b37'),
  farm_id: 574,
  solution_id: {
    solution_id: 574,
    insight_id: [Object],
    visualization_id: [Object],
    information: 'b57d70d4053f3cae077992f1d0b2bf2687c75ed6',
    user_id: [Object]
  },
  factors_id: {
    factors_id: 574,
    coverage_id: [Object],

```

```

    moisture_id: [Object],
    humidity_id: [Object],
    time: '10:08 AM'
  },
  region_id: {
    region_id: 574,
    soilType_id: [Object],
    climate_id: [Object],
    location: 55.9309486
  },
  crop_id: {
    crop_id: 574,
    Name: 'Pistachios',
    Requirements: null,
    health_id: [Object],
    yield_id: [Object],
    location: 34.6870111
  }
},
{
  _id: new ObjectId('66147b9edf8402a3bf997c0f'),
  farm_id: 790,
  solution_id: {
    solution_id: 790,
    insight_id: [Object],
    visualization_id: [Object],
    information: '3fb317de0ef349c352574e0cd15b4e2805b37403',
    user_id: [Object]
  },
  factors_id: {
    factors_id: 790,
    coverage_id: [Object],
    moisture_id: [Object],
    humidity_id: [Object],
    time: '10:08 AM'
  },
  region_id: {
    region_id: 790,
    soilType_id: [Object],
    climate_id: [Object],
    location: 37.56
  },
  crop_id: {
    crop_id: 790,
    Name: 'Spinach',
    Requirements: null,
    health_id: [Object],
    yield_id: [Object],
    location: 34.26545
  }
},
{
  _id: new ObjectId('66147b9edf8402a3bf997c43'),
  farm_id: 842,
  solution_id: {
    solution_id: 842,
    insight_id: [Object],

```

```

visualization_id: [Object],
information: '4fca26807de859e74dacd297cf00ac06b7c6550d',
user_id: [Object]
},
factors_id: {
  factors_id: 842,
  coverage_id: [Object],
  moisture_id: [Object],
  humidity_id: [Object],
  time: '10:08 AM'
},
region_id: {
  region_id: 842,
  soilType_id: [Object],
  climate_id: [Object],
  location: 26.141854
},
crop_id: {
  crop_id: 842,
  Name: 'Broccoli',
  Requirements: null,
  health_id: [Object],
  yield_id: [Object],
  location: 34.5107638
}
},
{
  _id: new ObjectId('66147b9edf8402a3bf997c50'),
  farm_id: 855,
  solution_id: {
    solution_id: 855,
    insight_id: [Object],
    visualization_id: [Object],
    information: 'ab6789fdc1bedafe9cdaeee63c89b457df6e792a',
    user_id: [Object]
  },
  factors_id: {
    factors_id: 855,
    coverage_id: [Object],
    moisture_id: [Object],
    humidity_id: [Object],
    time: '10:08 AM'
  },
  region_id: {
    region_id: 855,
    soilType_id: [Object],
    climate_id: [Object],
    location: 3.1409415
  },
  crop_id: {
    crop_id: 855,
    Name: 'Swiss chard',
    Requirements: null,
    health_id: [Object],
    yield_id: [Object],
    location: 34.9442746
  }
}

```

```

},
{
  _id: new ObjectId('66147b9edf8402a3bf997c8f'),
  farm_id: 918,
  solution_id: {
    solution_id: 918,
    insight_id: [Object],
    visualization_id: [Object],
    information: 'bcecf6d55b89f574c66a98a9cfcb4e988c3eddf5',
    user_id: [Object]
  },
  factors_id: {
    factors_id: 918,
    coverage_id: [Object],
    moisture_id: [Object],
    humidity_id: [Object],
    time: '10:08 AM'
  },
  region_id: {
    region_id: 918,
    soilType_id: [Object],
    climate_id: [Object],
    location: -38.9833
  },
  crop_id: {
    crop_id: 918,
    Name: 'Kidney beans',
    Requirements: null,
    health_id: [Object],
    yield_id: [Object],
    location: 34.8015007
  }
},
{
  _id: new ObjectId('66147b9edf8402a3bf997ca8'),
  farm_id: 943,
  solution_id: {
    solution_id: 943,
    insight_id: [Object],
    visualization_id: [Object],
    information: '59c3a408dab3c4515a4f302a19f9c71a3671548f',
    user_id: [Object]
  },
  factors_id: {
    factors_id: 943,
    coverage_id: [Object],
    moisture_id: [Object],
    humidity_id: [Object],
    time: '10:08 AM'
  },
  region_id: {
    region_id: 943,
    soilType_id: [Object],
    climate_id: [Object],
    location: 38.491235
  },
  crop_id: {

```



```

    crop_id: 943,
    Name: 'Kidney beans',
    Requirements: null,
    health_id: [Object],
    yield_id: [Object],
    location: 34.8100067
  }
},
{
  _id: new ObjectId('66147b9edf8402a3bf997cbd'),
  farm_id: 964,
  solution_id: {
    solution_id: 964,
    insight_id: [Object],
    visualization_id: [Object],
    information: 'bd845db87077269d76d4cc316b559d3de105b494',
    user_id: [Object]
  },
  factors_id: {
    factors_id: 964,
    coverage_id: [Object],
    moisture_id: [Object],
    humidity_id: [Object],
    time: '10:08 AM'
  },
  region_id: {
    region_id: 964,
    soilType_id: [Object],
    climate_id: [Object],
    location: 20.2258318
  },
  crop_id: {
    crop_id: 964,
    Name: 'Jicama',
    Requirements: null,
    health_id: [Object],
    yield_id: [Object],
    location: 34.66667
  }
},
{
  _id: new ObjectId('66147b9edf8402a3bf997cd9'),
  farm_id: 992,
  solution_id: {
    solution_id: 992,
    insight_id: [Object],
    visualization_id: [Object],
    information: '0afa6be310bc274b5dbfab8905d01e420b7cdd9',
    user_id: [Object]
  },
  factors_id: {
    factors_id: 992,
    coverage_id: [Object],
    moisture_id: [Object],
    humidity_id: [Object],
    time: '10:08 AM'
  },
},

```

```
region_id: {  
  region_id: 992,  
  soilType_id: [Object],  
  climate_id: [Object],  
  location: 31.760353  
},  
crop_id: {  
  crop_id: 992,  
  Name: 'Green onions (Scallions)',  
  Requirements: null,  
  health_id: [Object],  
  yield_id: [Object],  
  location: 34.7179437  
}  
}  
]
```