

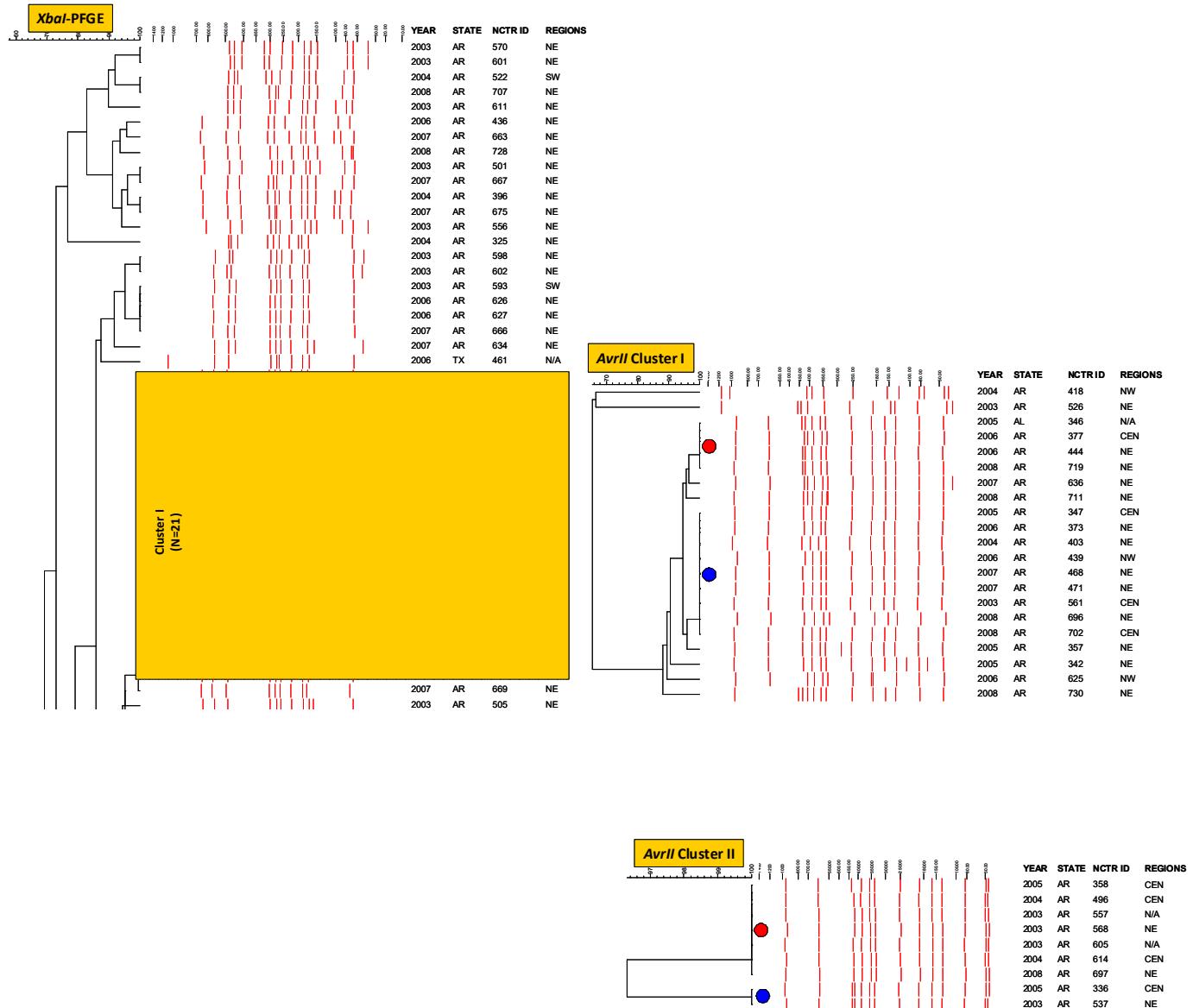
**Supplemental Table S1 *Salmonella enterica* serovar Javiana virulence gene targets,  
their function, primer sequences and amplicon sizes used in this study**

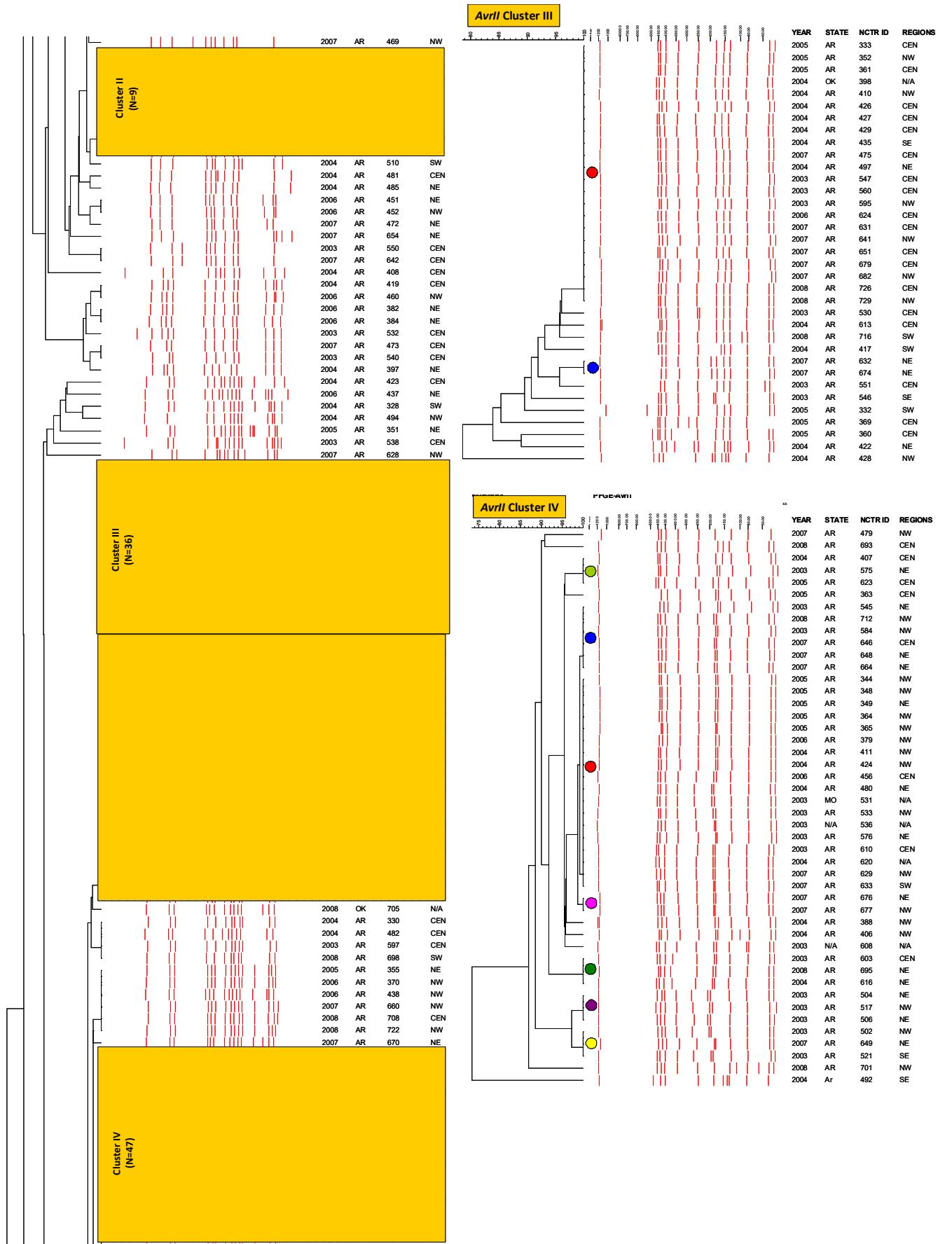
| Target gene | Function   | Oligonucleotide sequence  | Amplicon size | Reference              |
|-------------|--|---|---------------|------------------------|
| <i>spvB</i> | Growth within host                                     | F: CTATCAGCCCCGACGGAGAGCAGTTTTA<br>R: GGAGGAGGCCTGGCGGTGGCATCATA      | 717           | Skyberg, Av. Dis, 2006 |
| <i>spiA</i> | Survival within macrophage                             | F: CCAGGGTCGTTAGTGTATTGCGTGAGATG<br>R: CGCGTAACAAAGAACCCGTAGTGATGGATT | 550           | Skyberg, Av. Dis, 2006 |
| <i>pagC</i> | Survival within macrophage                             | F: CGCCTTTCCGTGGGGTATGC<br>R: GAAGCCGTTTATTTTGTAGAGGAGATGTT           | 454           | Skyberg, Av. Dis, 2006 |
| <i>cdtB</i> | Host recognition/invasion                              | F: ACAACTGTCGATCTGCCCGTCATT<br>R: CAATTGCGTGGGTTCTGTAGGTGCGAGT        | 268           | Skyberg, Av. Dis, 2006 |
| <i>msgA</i> | Survival within macrophage                             | F: GCCAGGCGCACGCGAAATCATCC<br>R: GCGACCAGCCACATATCAGCCTTCAAAC         | 189           | Skyberg, Av. Dis, 2006 |
| <i>sipB</i> | Entry into nonphagocytic cells, killing of macrophages | F: GGACGCCGCCGGGAAAAACTCTC<br>R: ACACCTCCGTCGCCGCCCTCACAA             | 875           | Skyberg, Av. Dis, 2006 |
| <i>prgH</i> | Host recognition/invasion                              | F: GCCCGAGCAGCCTGAGAAGTTAGAAA<br>R: TGAAATGAGCGCCCTTGAGCCAGTC         | 756           | Skyberg, Av. Dis, 2006 |
| <i>spaN</i> | Entry into nonphagocytic cells, killing of macrophages | F: AAAAGCCGTGGAATCCGTTAGTGAAGT<br>R: CAGCGCTGGGATTACCGTTTG            | 504           | Skyberg, Av. Dis, 2006 |
| <i>orgA</i> | Host recognition/invasion                              | F: TTTTGGCAATGCATCAGGGAAACA<br>R: GGCAGAACGGGGACGGTATT                | 255           | Skyberg, Av. Dis, 2006 |
| <i>tolC</i> | Host recognition/invasion                              | F: TACCCAGGCGCAAAAGAGGGCTATC<br>R: CCGCGTTATCCAGGTTGTTGC              | 161           | Skyberg, Av. Dis, 2006 |
| <i>lpfC</i> | Host recognition/invasion                              | F: GCCCCGCCTGAAGCCTGTGTTGC<br>R: AGGTGCGCGCTGTTGAGGTTGGATA            | 641           | Skyberg, Av. Dis, 2006 |
| <i>sifA</i> | Filamentous structure formation                        | F: TTTGCCAACGCGCCCCCACACG<br>R: GTTGCCTTTCTTGCCTTCCACCCATCT           | 449           | Skyberg, Av. Dis, 2006 |
| <i>sopB</i> | Host recognition/invasion                              | F: ATGCAAATACAGAGCTTCTATCA<br>R: GGCATAAAGGGACAGCACA                  | 1700          | Nayak, IJFM, 2004      |
| <i>pefB</i> | Host recognition/invasion                              | F: TGATGCTAACAGAAAAAGAT<br>R: ATAATAAACACCAGTGAG                      | 296           | Foley, JCM, 2006       |
| <i>iroN</i> | Iron acquisition                                       | F: ACTGGCACGGCTCGCTGCGCTCTAT<br>R: CGCTTACGCCGTTCTGCCTACTGC           | 1205          | Skyberg, Av. Dis, 2006 |
| <i>sitA</i> | Iron acquisition                                       | F: AAGCGTTGGAACCACAATT<br>R: GTCCTCACCTGCTCGATAGC                     | 245           |                        |

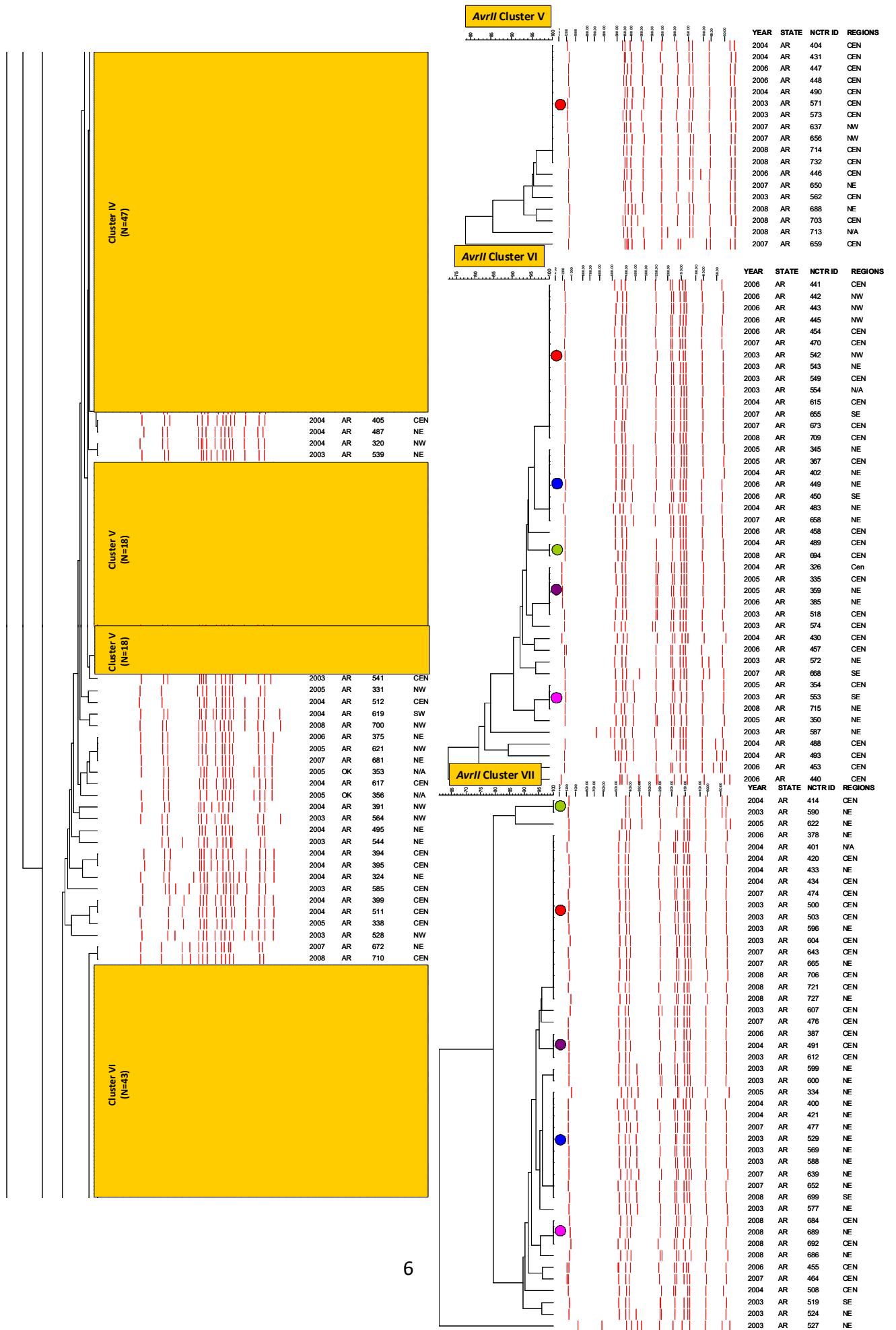
|                    |   |  |     |                                 |
|--------------------|---|--|-----|---------------------------------|
| <i>hilA</i>        | Host recognition/invasion                                       | F:TTAACGTCCGGTCGTAGTG<br>R:TCTGCCAGCGCACAGTAAGG            | 597 | Foley, JCM, 2006                |
| <i>fimH</i>        | Adhesion to cells   | F:GGGACGGCGACCGATATCTT<br>R:TTGTCTGGCGAGGGATCGTC           | 412 | Foley, JCM, 2006                |
| <i>iss</i>         | Survival  | F:TCACATAGGATTCTGCCG<br>R:AGAAATCAAAAGGTGGCC               | 607 | Dezfulian,JC M, 2003            |
| <i>iutA</i>        | Aerobactin receptor   | F:GGCTGGACATCATGGGAACTGG<br>R:CGTCGGAACGGTAGAATCG          | 302 |                                 |
| <i>iucC</i>        | Iron uptake; intracellular growth                               | F:GTCGCCGTGGTGGGTAAGAG<br>R:TCCCCCGTAGCATGAGGTGTTGT        | 429 |                                 |
| <i>virB4</i>       | Type 4 secretion system   | F:TTGGCATTGATGGCACCGAGTTTC<br>R:TGTAATCGGCATCAGGGTTAGCCA   | 315 |                                 |
| <i>virD4</i>       | Type 4 secretion system   | F:TCGGCCTCTCAGCTGAGGAAATCT<br>R:TTTGAAGTCCGGAGCAACCTTC     | 370 |                                 |
| <i>invA</i>        | Host recognition/invasion                                       | F:TATGCCACGTTGGGCAA<br>R:TCGCACCGTCAAAGGAACC               | 275 | Nayak, IJFM, 2004               |
| <i>h-<i>li</i></i> | Flagellin   | F:AGCCTCGGCTACTGGTCTTG<br>R:CCGAGCAAGAGTCACCTCA            | 173 | Nayak, IJFM, 2004               |
| <i>aceK</i>        | Regulation of isocitrate in tricarboxylic and glyoxylate bypass | F:CAGGGCGAGGGTATGAAACAC<br>R:AACTGCGATTCTCGGTAGAAC         | 191 | Nayak, IJFM, 2004               |
| <i>iacP</i>        | Invasion associated acyl carrier                                | F:CACCTCTGTATTGCCGTTG<br>R:GGCATATATCCGCAAAGGTC            | 176 | Zou, unpub. data                |
| <i>sopE</i>        | Encodes a effector protein                                      | F: ATTGTTGTGGCGTTGGCATCGT<br>R: AATGCGAGTAAAGATCCGGCCT     | 186 | Zou, unpub. Data                |
| <i>rhuM</i>        | Encodes a cytoplasmic protein                                   | F: CATCGGCTGTACCCGACTAT<br>R: CAGCACGCTGATGAATGAGT         | 222 | Zou, unpub. Data                |
| <i>spi4H</i>       | Inhibits serine peptidase                                       | F: ACTGCTCGCTTGTGGTATCAGGAA<br>R: TCTTACCGTGCTGTGGATGGTTCA | 154 | Courtney, Mol Cell Probes, 2006 |
| <i>ttrB</i>        | Tetrathionate respiration                                       | F: ATGTGGACGGGAGTCAATATGG<br>R: GTGGCGATCGGGCTATGG         | 608 | Courtney, Mol Cell Probes, 2006 |
| <i>sugR</i>        | Encodes ATP binding protein                                     | F: ACTGCTCGCTTGTGGTATCAGGAA<br>R: TCTTACCGTGCTGTGGATGGTTCA | 152 | Zou, unpub. Data                |

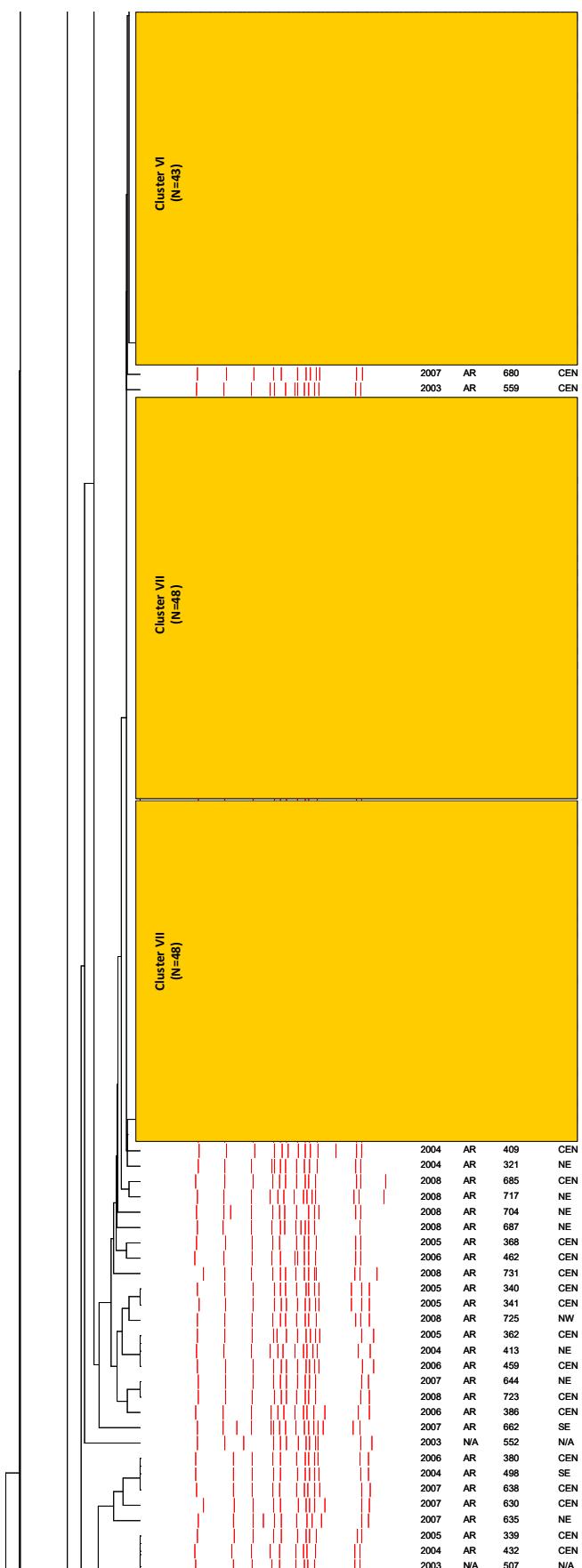
|             |                                       |   |     |  |
|-------------|---------------------------------------|---|-----|--|
| <i>purR</i> | DNA-binding transcriptional repressor | F: CGCTTCCCCTTTCCTCAAG<br>R: CCATCACCAACCATCGGAATATG    | 629 | Courtney,<br>Mol Cell<br>Probes,<br>2006 |
| <i>rmbA</i> | Encodes a cytoplasmic protein         | F: AGCCTTCACAAATTGTCCATTG<br>R: TCCGTATAAGTTAACCGTTCGTC | 454 | Courtney,<br>Mol Cell<br>Probes,<br>2006 |
| <i>avrA</i> | Encodes a secreted effector protein   | F: AATGGAAGGC GTTGAATCTG<br>R: GAGCTGCTTGGTCCTCAAC      | 170 | Zou, unpub.<br>Data                      |

**Supplemental Figure S1 Dendrogram based on *Xba*I and *Avr*II pulsed-field gel electrophoresis macro-restriction profiles of *Salmonella* Javiana strains. The dendrogram on the left illustrates *Xba*I digested profiles, while the dendograms on the right illustrate *Avr*II digested profiles for the corresponding cluster**

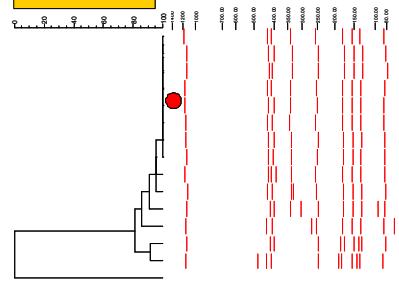




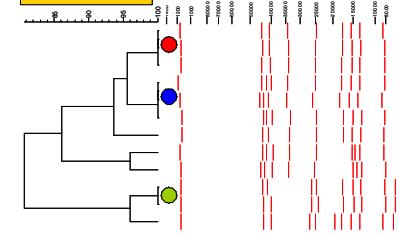


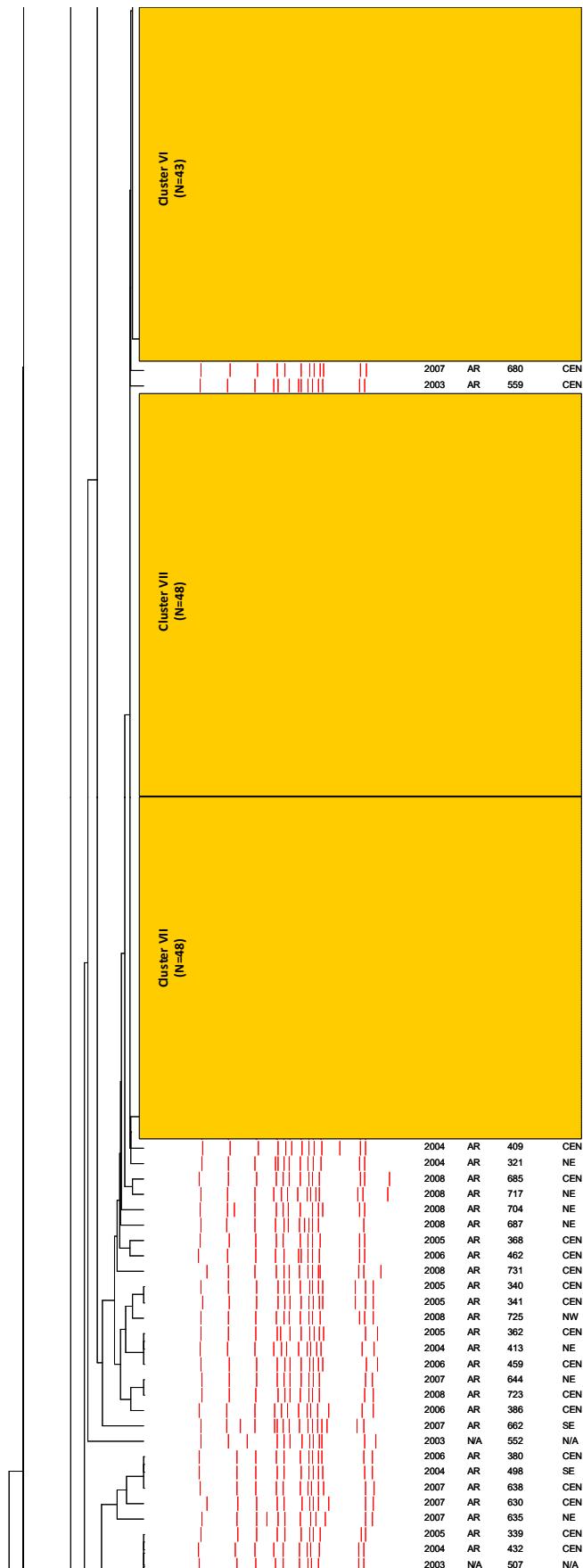


**Avril Cluster VIII**

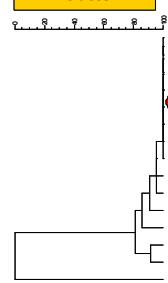


**Avril Cluster IX**



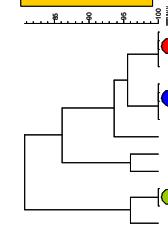


**AvrII Cluster VIII**



| YEAR | STATE | NCTR ID | REGIONS |
|------|-------|---------|---------|
| 2004 | AR    | 323     | CEN     |
| 2004 | AR    | 327     | CEN     |
| 2005 | AR    | 343     | CEN     |
| 2005 | AR    | 366     | CEN     |
| 2006 | AR    | 376     | CEN     |
| 2004 | AR    | 416     | CEN     |
| 2004 | AR    | 425     | CEN     |
| 2003 | AR    | 548     | SW      |
| 2005 | AR    | 337     | CEN     |
| 2006 | AR    | 718     | CEN     |
| 2003 | AR    | 516     | CEN     |
| 2007 | AR    | 647     | NE      |
| 2004 | AR    | 322     | SE      |
| 2004 | AR    | 389     | CEN     |
| 2003 | AR    | 589     | CEN     |

**AvrII Cluster IX**



| YEAR | STATE | NCTR ID | REGIONS |
|------|-------|---------|---------|
| 2007 | AR    | 478     | CEN     |
| 2003 | AR    | 565     | NW      |
| 2007 | AR    | 671     | CEN     |
| 2007 | AR    | 465     | CEN     |
| 2004 | AR    | 484     | SE      |
| 2007 | AR    | 678     | CEN     |
| 2004 | AR    | 618     | NE      |
| 2006 | AR    | 374     | CEN     |
| 2003 | AR    | 583     | NW      |
| 2003 | AR    | 566     | N/A     |
| 2008 | AR    | 683     | CEN     |
| 2007 | AR    | 653     | NE      |

