**Supplementary Table 1.** *Leptospira spp.* species,serogroups, serovars and strains used for microaglutination test (MAT) in this study.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| N° | SpECIE | SerogruOp | Serovar | sTRAIN |
| 1 | *L. santarosai* | Shermani | Shermani | 1342 k |
| 2 | *L. interrogans* | Bataviae | Bataviae | Van tienen + Swart |
| 3 | *L. kirschneri* | Cynopteri | Cynopteri | 3522c |
| 4 | *L. interrogans* | Hebdomadis | Hebdomadis | Hebdomadis |
| 5 | *L. borgpetersenii* | Tarassovi | Tarassovi | Perepelitsin |
| 6 | *L. interrogans* | Icterohaemorrhagiae | Icterohaemorrhagiae | Ictero I |
| 7 | *L. borgpetersenii* | Sejroe | Saxkoebing | Mus 24 |
| 8 | *L. interrogans* | Sejroe | Hardjo | Hardjoprajtino |
| 9 | *L. interrogans* | Pomona | Pomona | Pomona |
| 10 | *L. interrogans* | Sejroe | Wolffi | 3705 |
| 11 | *L. interrogans* | Autumnalis | Autumnalis | Akiyami A |
| 12 | *L. interrogans* | Canicola | Canicola | Hond Utrecht IV |
| 13 | *L. weilii* | Celledoni | Celledoni | Celledoni |
| 14 | *L. kirschneri* | Grippotyphosa | Grippotyphosa | Moska V |
| 15 | *L. interrogans* | Pyrogenes | Pyrogenes | Salinem |
| 16 | *L. interrogans* | Australis | Bratislava | Jez Bratislava |
| 17 | *L. noguchii* | Panama | Panama | CZ 214 |
| 18 | *L. interrogans* | Icterohaemorrhagiae | Copenhageni | M20 |
| 19 | *L. borgpetersenii* | Ballum | Castellonis | Castellon 3 |
| 20 | *L. borgpetersenii* | Javanica | Javanica | Veldrat Batavia 46 |
| 21 | *L. interrogans* | Australis | Australis | Ballico |
| 22 | *L. Borgpetersenii* | Sejroe | Sejroe | M 84 |
| 23 | *L. interrogans* | Djasiman | Djasiman | Djasiman |
| 24 | *L. biflexa* | Semaranga | Patoc | Patoc I |

**Supplementary Table 2. Titers values for MAT test for serovars of *Leptospira spp*. in sera from 108 racing horses included in the study (cut off titer value of 200).**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | *bataviae van tienen* | *cynopteri* | *tarassovi* | *icterohaemorrhagiae* | *saxkoebing* | *hardjo* | *pomona* | *wolffi* | *canicola* | *celledoni* | *grippotyphosa* | *pyrogenes* | *bratislava* | *copenhageni* | *australis* | *sejroe* | *bataviae swart* | *djasiman* |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** |
| **1** |  |  | 1/200 | 1/200 | 1/200 |  | 1/200 |  |  |  | 1/400 |  |  |  |  | 1/400 |  |  |
| **2** |  |  | 1/400 | 1/200 | 1/200 |  | 1/200 |  | 1/200 |  | 1/400 |  |  |  |  | 1/200 |  |  |
| **3** |  |  | 1/400 | 1/200 | 1/200 |  | 1/200 |  | 1/200 |  | 1/400 |  |  |  |  | 1/400 |  |  |
| **4** |  |  | 1/400 | 1/400 | 1/400 |  | 1/200 |  | 1/400 |  | 1/800 |  |  |  |  | 1/400 |  |  |
| **5** |  |  | 1/200 | 1/200 | 1/200 |  | 1/200 |  |  |  | 1/200 |  |  |  |  | 1/200 |  |  |
| **6** |  |  | 1/400 | 1/200 | 1/200 |  | 1/200 |  | 1/200 |  | 1/400 |  |  |  |  | 1/400 |  |  |
| **7** |  |  | 1/400 | 1/400 | 1/200 |  | 1/200 |  | 1/200 |  | 1/400 |  |  |  |  | 1/400 |  |  |
| **8** |  |  | 1/400 | 1/200 | 1/400 |  | 1/200 |  | 1/200 |  | 1/400 |  |  |  |  | 1/400 |  |  |
| **9** | 1/200 |  | 1/400 | 1/200 | 1/200 |  | 1/400 |  | 1/400 |  | 1/400 |  |  |  |  | 1/400 |  |  |
| **10** |  |  | 1/400 | 1/200 | 1/200 |  | 1/200 |  | 1/400 |  | 1/400 |  |  |  |  | 1/200 |  |  |
| **11** |  |  | 1/400 | 1/200 | 1/400 |  | 1/200 |  | 1/800 |  | 1/400 |  |  |  |  | 1/400 |  |  |
| **12** |  |  | 1/200 | 1/200 | 1/400 |  | 1/400 |  | 1/200 |  | 1/400 |  |  |  |  | 1/800 |  |  |
| **13** |  |  | 1/200 | 1/200 | 1/200 |  | 1/400 |  | 1/400 |  | 1/400 |  |  |  |  | 1/400 |  |  |
| **14** |  |  | 1/400 |  | 1/400 |  | 1/400 |  | 1/800 |  | 1/200 |  | 1/400 |  | 1/200 | 1/400 |  |  |
| **15** |  |  | 1/400 | 1/200 |  |  | 1/400 |  |  |  | 1/400 |  | 1/200 |  |  | 1/800 |  |  |
| **16** |  | 1/200 | 1/400 | 1/200 | 1/400 |  | 1/400 |  | 1/200 |  | 1/200 |  | 1/200 |  | 1/200 | 1/800 |  |  |
| **17** |  |  | 1/400 | 1/400 | 1/200 |  | 1/400 |  | 1/200 |  | 1/200 |  |  |  |  | 1/800 |  |  |
| **18** |  | 1/200 | 1/400 | 1/400 | 1/200 |  | 1/200 |  | 1/400 |  | 1/400 |  |  |  | 1/200 | 1/200 |  |  |
| **19** |  |  | 1/400 | 1/400 | 1/200 |  | 1/400 |  | 1/400 |  | 1/400 |  |  |  |  | 1/200 |  |  |
| **20** | 1/200 | 1/200 | 1/400 | 1/400 | 1/200 |  | 1/200 |  | 1/400 |  | 1/200 |  | 1/200 |  | 1/200 | 1/200 |  |  |
| **21** |  |  | 1/400 |  | 1/200 |  | 1/200 |  | 1/200 | 1/200 | 1/800 |  |  |  | 1/200 | 1/200 |  |  |
| **22** | 1/200 |  | 1/400 | 1/400 | 1/400 |  | 1/200 |  | 1/200 | 1/200 | 1/800 |  | 1/200 |  | 1/400 | 1/800 |  |  |
| **23** |  |  | 1/400 | 1/200 | 1/400 |  | 1/200 |  | 1/400 | 1/200 | 1/800 |  | 1/200 |  | 1/200 | 1/400 |  |  |
| **24** | 1/200 |  | 1/200 | 1/200 | 1/400 |  | 1/200 |  | 1/200 |  | 1/400 |  |  |  |  | 1/800 |  |  |
| **25** |  |  | 1/200 | 1/200 | 1/200 |  | 1/200 |  | 1/200 |  | 1/800 |  |  |  | 1/200 | 1/800 |  |  |
| **26** |  |  |  | 1/200 | 1/200 |  | 1/200 |  | 1/200 | 1/200 | 1/400 |  | 1/200 |  | 1/400 | 1/800 |  |  |
| **27** |  |  | 1/400 | 1/200 | 1/200 |  | 1/200 |  | 1/200 |  | 1/400 |  | 1/200 |  | 1/400 |  |  |  |
| **28** |  | 1/200 | 1/400 | 1/400 | 1/200 |  | 1/200 |  | 1/400 |  | 1/200 |  |  |  |  |  |  |  |
| **29** |  |  | 1/400 | 1/200 | 1/400 |  | 1/200 |  | 1/800 | 1/200 | 1/200 |  | 1/200 |  |  | 1/800 |  | 1/200 |
| **30** |  |  |  | 1/200 | 1/200 |  | 1/400 |  | 1/800 |  | 1/200 |  |  |  |  | 1/200 |  |  |
| **31** |  |  | 1/400 | 1/400 | 1/200 |  | 1/200 |  | 1/800 |  | 1/400 |  |  |  | 1/200 | 1/400 |  | 1/400 |
| **32** | 1/200 |  | 1/200 | 1/400 | 1/200 |  | 1/400 |  | 1/800 | 1/200 | 1/200 |  |  |  |  | 1/200 |  |  |
| **33** |  |  |  | 1/200 | 1/200 |  | 1/200 |  | 1/800 | 1/200 | 1/200 |  |  |  |  |  |  |  |
| **34** | 1/400 | 1/200 |  |  | 1/200 | 1/200 |  |  | 1/800 |  | 1/200 |  | 1/1600 | 1/400 | 1/200 | 1/200 | 1/200 |  |
| **35** | 1/400 | 1/200 |  | 1/200 | 1/400 | 1/200 | 1/200 |  | 1/400 |  | 1/400 |  | 1/200 | 1/200 | 1/200 | 1/200 |  |  |
| **36** | 1/400 | 1/200 |  | 1/200 | 1/200 | 1/200 | 1/200 |  | 1/400 |  | 1/400 |  | 1/200 | 1/200 | 1/200 | 1/200 |  |  |
| **37** | 1/400 | 1/200 |  | 1/200 | 1/400 | 1/200 |  |  | 1/200 |  | 1/200 |  | 1/200 |  | 1/200 | 1/200 |  |  |
| **38** | 1/800 | 1/200 |  |  | 1/400 | 1/200 | 1/200 |  | 1/800 |  | 1/800 |  | 1/400 |  |  | 1/200 |  |  |
| **39** | 1/400 |  |  |  | 1/400 | 1/200 | 1/200 |  | 1/400 |  | 1/400 |  | 1/200 |  |  | 1/200 |  |  |
| **40** | 1/400 | 1/200 |  |  | 1/400 | 1/200 |  |  | 1/400 |  | 1/200 |  | 1/200 | 1/200 | 1/200 | 1/200 | 1/200 |  |
| **41** | 1/800 | 1/200 |  | 1/200 | 1/400 | 1/200 |  |  | 1/200 |  | 1/400 |  | 1/400 |  | 1/200 | 1/200 |  |  |
| **42** | 1/400 | 1/200 |  |  | 1/800 | 1/200 | 1/200 |  | 1/400 |  | 1/800 |  | 1/400 |  | 1/200 | 1/200 |  |  |
| **43** | 1/400 | 1/200 |  |  | 1/400 | 1/200 |  |  | 1/1600 |  | 1/800 |  | 1/400 | 1/400 | 1/200 | 1/200 |  |  |
| **44** | 1/400 | 1/200 |  | 1/200 | 1/400 | 1/200 | 1/200 |  | 1/400 |  | 1/800 |  | 1/400 | 1/200 |  | 1/200 |  |  |
| **45** | 1/400 | 1/200 |  | 1/200 | 1/400 | 1/200 |  |  | 1/800 |  | 1/200 |  | 1/400 |  | 1/200 | 1/400 |  |  |
| **46** | 1/400 | 1/200 |  |  | 1/400 | 1/200 | 1/200 |  | 1/800 |  | 1/200 |  | 1/800 | 1/400 | 1/200 | 1/200 |  |  |
| **47** | 1/400 | 1/200 |  | 1/200 | 1/200 | 1/200 |  |  | 1/1600 |  | 1/200 |  | 1/800 | 1/400 | 1/200 | 1/400 |  |  |
| **48** | 1/400 |  |  |  | 1/200 | 1/200 | 1/200 |  | 1/200 |  | 1/200 |  | 1/800 | 1/400 | 1/200 | 1/400 | 1/200 |  |
| **49** | 1/800 | 1/200 |  | 1/200 | 1/400 |  | 1/200 |  | 1/1600 |  | 1/800 |  | 1/1600 | 1/800 | 1/200 | 1/400 | 1/200 |  |
| **50** | 1/400 | 1/200 |  | 1/200 | 1/800 |  | 1/200 |  | 1/800 |  | 1/800 |  | 1/400 | 1/400 | 1/200 | 1/200 | 1/400 |  |
| **51** | 1/400 | 1/200 | 1/400 | 1/200 | 1/400 |  | 1/200 |  | 1/200 |  | 1/400 |  | 1/400 | 1/800 | 1/200 | 1/200 | 1/400 |  |
| **52** |  | 1/200 | 1/400 |  | 1/200 |  | 1/200 |  | 1/200 |  | 1/400 |  | 1/400 | 1/200 | 1/200 | 1/400 |  |  |
| **53** | 1/400 | 1/200 | 1/200 | 1/200 | 1/200 |  | 1/200 |  | 1/400 |  | 1/400 |  | 1/400 | 1/200 | 1/200 | 1/400 | 1/800 |  |

**Supplementary Table 3. Titers values for MAT test for serovars of *Leptospira spp*. in sera from 108 racing horses included in the study (cut off titer value of 200; only 11 positive serovars out of 24 serovars tested are detailed).**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | *bataviae van tienen* | *tarassovi* | *icterohaemorrhagiae* | *saxkoebing* | *canicola* | *grippotyphosa* | *bratislava* | *copenhageni* | *sejroe* | *bataviae swart* | *djasiman* |
|  | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** |
| **1** |  |  |  |  |  |  |  |  |  |  |  |
| **2** |  |  |  |  |  |  |  |  |  |  |  |
| **3** |  |  |  |  |  |  |  |  |  |  |  |
| **4** |  |  |  |  |  | 1/800 |  |  |  |  |  |
| **5** |  |  |  |  |  |  |  |  |  |  |  |
| **6** |  |  |  |  |  |  |  |  |  |  |  |
| **7** |  |  |  |  |  |  |  |  |  |  |  |
| **8** |  |  |  |  |  |  |  |  |  |  |  |
| **9** |  |  |  |  |  |  |  |  |  |  |  |
| **10** |  |  |  |  |  |  |  |  |  |  |  |
| **11** |  |  |  |  | 1/800 |  |  |  |  |  |  |
| **12** |  |  |  |  |  |  |  |  | 1/800 |  |  |
| **13** |  |  |  |  |  |  |  |  |  |  |  |
| **14** |  |  |  |  | 1/800 |  |  |  |  |  |  |
| **15** |  |  |  |  |  |  |  |  | 1/800 |  |  |
| **16** |  |  |  |  |  |  |  |  | 1/800 |  |  |
| **17** |  |  |  |  |  |  |  |  | 1/800 |  |  |
| **18** |  |  |  |  |  |  |  |  |  |  |  |
| **19** |  |  |  |  |  |  |  |  |  |  |  |
| **20** |  |  |  |  |  |  |  |  |  |  |  |
| **21** |  |  |  |  |  | 1/800 |  |  |  |  |  |
| **22** |  |  |  |  |  | 1/800 |  |  | 1/800 |  |  |
| **23** |  |  |  |  |  | 1/800 |  |  |  |  |  |
| **24** |  |  |  |  |  |  |  |  | 1/800 |  |  |
| **25** |  |  |  |  |  | 1/800 |  |  | 1/800 |  |  |
| **26** |  |  |  |  |  |  |  |  | 1/800 |  |  |
| **27** |  |  |  |  |  |  |  |  |  |  |  |
| **28** |  |  |  |  |  |  |  |  |  |  |  |
| **29** |  |  |  |  | 1/800 |  |  |  | 1/800 |  |  |
| **30** |  |  |  |  | 1/800 |  |  |  |  |  |  |
| **31** |  |  |  |  | 1/800 |  |  |  |  |  |  |
| **32** |  |  |  |  | 1/800 |  |  |  |  |  |  |
| **33** |  |  |  |  | 1/800 |  |  |  |  |  |  |
| **34** |  |  |  |  | 1/800 |  | 1/1600 |  |  |  |  |
| **35** |  |  |  |  |  |  |  |  |  |  |  |
| **36** |  |  |  |  |  |  |  |  |  |  |  |
| **37** |  |  |  |  |  |  |  |  |  |  |  |
| **38** | 1/800 |  |  |  | 1/800 | 1/800 |  |  |  |  |  |
| **39** |  |  |  |  |  |  |  |  |  |  |  |
| **40** |  |  |  |  |  |  |  |  |  |  |  |
| **41** | 1/800 |  |  |  |  |  |  |  |  |  |  |
| **42** |  |  |  | 1/800 |  | 1/800 |  |  |  |  |  |
| **43** |  |  |  |  | 1/1600 | 1/800 |  |  |  |  |  |
| **44** |  |  |  |  |  | 1/800 |  |  |  |  |  |
| **45** |  |  |  |  | 1/800 |  |  |  |  |  |  |
| **46** |  |  |  |  | 1/800 |  | 1/800 |  |  |  |  |
| **47** |  |  |  |  | 1/1600 |  | 1/800 |  |  |  |  |
| **48** |  |  |  |  |  |  | 1/800 |  |  |  |  |
| **49** | 1/800 |  |  |  | 1/1600 | 1/800 | 1/1600 | 1/800 |  |  |  |
| **50** |  |  |  | 1/800 | 1/800 | 1/800 |  |  |  |  |  |
| **51** |  |  |  |  |  |  |  | 1/800 |  |  |  |
| **52** |  |  |  |  |  |  |  |  |  |  |  |
| **53** |  |  |  |  |  |  |  |  |  | 1/800 |  |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | *L. bataviae van tienen* | *L. tarassovi* | *L. icterohaemorrhagiae* | *L. saxkoebing* | *L. canicola* | *L. grippotyphosa* | *L. bratislava* | *L. copenhageni* | *L. sejroe* | *L. bataviae swart* | *L. djasiman* |
| **54** | 1/800 |  |  |  |  |  |  |  |  |  |  |
| **55** | 1/800 |  |  |  |  |  |  |  |  |  |  |
| **56** | 1/800 |  |  |  |  |  |  |  |  |  |  |
| **57** | 1/800 |  |  |  | 1/800 |  |  |  |  | 1/800 | 1/800 |
| **58** | 1/800 |  |  |  |  |  |  |  |  |  |  |
| **59** |  |  |  |  |  |  |  |  |  |  |  |
| **60** |  |  |  |  |  |  |  |  |  |  |  |
| **61** | 1/800 |  |  |  |  |  |  |  |  |  |  |
| **62** | 1/800 |  |  |  |  | 1/800 |  |  |  |  |  |
| **63** |  |  |  |  |  |  |  |  |  |  |  |
| **64** |  |  |  |  |  |  |  |  |  |  |  |
| **65** |  |  |  |  |  |  |  |  |  |  |  |
| **66** |  |  |  |  |  |  |  |  |  |  |  |
| **67** |  |  |  |  |  |  | 1/800 |  |  |  |  |
| **68** |  |  | 1/800 |  |  |  | 1/800 |  |  | 1/800 |  |
| **69** | 1/800 |  |  |  |  |  |  |  |  | 1/800 |  |
| **70** | 1/800 |  |  |  |  |  |  |  |  |  |  |
| **71** |  |  |  |  |  |  |  |  |  |  |  |
| **72** |  |  |  |  |  |  |  |  |  |  |  |
| **73** |  |  |  |  |  |  |  |  |  |  |  |
| **74** |  |  |  |  |  |  |  |  |  |  |  |
| **75** |  |  |  |  |  |  |  |  |  |  |  |
| **76** |  |  |  |  |  |  |  |  |  |  |  |
| **77** |  |  |  |  |  |  |  |  |  |  |  |
| **78** |  |  |  |  |  |  | 1/800 |  |  |  |  |
| **79** |  |  |  |  |  |  |  |  |  |  |  |
| **80** |  |  |  |  |  |  |  |  |  |  |  |
| **81** |  |  |  |  |  |  |  |  |  |  |  |
| **82** |  |  |  |  |  |  |  |  |  |  |  |
| **83** |  |  |  |  |  |  |  |  |  |  |  |
| **84** |  |  |  |  |  |  |  |  |  |  |  |
| **85** |  |  |  |  |  |  |  |  |  |  |  |
| **86** |  |  |  |  |  |  |  |  |  |  |  |
| **87** |  |  |  |  |  |  |  |  |  |  |  |
| **88** | 1/800 |  |  |  |  |  |  |  |  |  |  |
| **89** |  |  |  |  |  |  |  |  |  |  |  |
| **90** | 1/800 |  |  |  |  |  |  |  |  |  |  |
| **91** | 1/800 |  |  |  | 1/800 |  |  |  |  | 1/800 |  |
| **92** |  |  |  |  |  |  |  |  |  | 1/800 |  |
| **93** |  |  |  |  | 1/800 |  |  |  |  |  |  |
| **94** |  |  |  |  |  |  |  |  |  |  |  |
| **95** |  |  |  |  |  |  |  |  |  |  |  |
| **96** |  |  |  |  |  |  |  |  |  |  |  |
| **97** |  |  |  |  |  |  |  |  |  |  |  |
| **98** |  | 1/800 |  |  |  |  |  |  |  |  |  |
| **99** | 1/800 | 1/800 |  |  |  |  |  |  |  |  |  |
| **100** |  |  |  |  |  |  |  |  |  |  |  |
| **101** | 1/800 |  |  |  |  |  |  |  |  |  |  |
| **102** | 1/800 |  | 1/800 |  | 1/800 |  |  |  |  |  |  |
| **103** | 1/800 |  |  |  | 1/800 |  |  |  |  |  |  |
| **104** |  |  |  |  |  |  |  |  |  |  |  |
| **105** |  |  |  |  |  |  |  |  |  |  |  |
| **106** |  |  |  |  |  |  |  |  |  |  |  |
| **107** |  |  |  |  |  |  |  |  |  |  |  |
| **108** |  |  |  |  |  |  |  |  |  |  |  |