**Table S1.** Odds ratio for members of the family *Potyviridae*

| Genus | Reference | Abbreviation | Name | AA | AT | AC | AG | TA | TT | TC | TG | CA | CT | CC | CG | GA | GT | GC | GG | Size | A | T | C | G |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arepavirus | MH395371.1 | ANRSV | Areca palm necrotic virus | 0,992 | 0,927 | 1,038 | 1,071 | 0,614 | 1,337 | 0,943 | 1,258 | 1,519 | 0,904 | 0,905 | 0,813 | 1,083 | 0,789 | 1,078 | 1,059 | 9434 | 0,353 | 0,262 | 0,165 | 0,221 |
| Bevemovirus | KY491536.1 | BeVMV | Bellflower veinal mottle virus | 1,058 | 1,045 | 0,987 | 0,895 | 0,544 | 1,143 | 1,045 | 1,239 | 1,482 | 0,866 | 0,748 | 0,781 | 1,067 | 0,907 | 1,168 | 0,946 | 8259 | 0,284 | 0,263 | 0,211 | 0,242 |
| Brambivirus | AY994084.1 | BIVY | Blackberry virus Y | 0,929 | 1,029 | 1,134 | 0,945 | 0,731 | 1,180 | 0,854 | 1,303 | 1,393 | 0,788 | 0,862 | 0,819 | 1,035 | 0,957 | 1,101 | 0,909 | 10851 | 0,314 | 0,250 | 0,207 | 0,229 |
| Bymovirus | Y10973.1/X90904.1 | BaMMV | Barley mild mosaic virus | 1,045 | 0,908 | 1,075 | 0,951 | 0,561 | 1,171 | 1,057 | 1,296 | 1,269 | 1,052 | 0,761 | 0,900 | 1,085 | 0,870 | 1,137 | 0,869 | 10785 | 0,275 | 0,235 | 0,268 | 0,222 |
| | AJ132268.1/AJ132269.1 | BaYMV | Barley yellow mosaic virus | 1,087 | 0,925 | 0,997 | 0,986 | 0,571 | 1,162 | 1,041 | 1,294 | 1,313 | 1,065 | 0,773 | 0,784 | 1,060 | 0,830 | 1,205 | 0,903 | 11219 | 0,274 | 0,263 | 0,242 | 0,221 |
| | AJ306718.1/AJ306719.1 | OMV | Oat mosaic virus | 1,129 | 0,931 | 0,988 | 0,929 | 0,608 | 1,161 | 0,999 | 1,319 | 1,236 | 1,061 | 0,867 | 0,779 | 1,017 | 0,829 | 1,173 | 0,977 | 9834 | 0,278 | 0,253 | 0,253 | 0,216 |
| | LC055681.1/LC060925.1 | RNMV | Rice necrosis mosaic virus | 1,092 | 0,920 | 1,031 | 0,936 | 0,568 | 1,208 | 1,011 | 1,237 | 1,259 | 1,018 | 0,795 | 0,841 | 1,093 | 0,864 | 1,040 | 0,984 | 10757 | 0,301 | 0,248 | 0,224 | 0,227 |
| | MH645041.1/MH645043.1 | WSSMV | Wheat spindle streak mosaic virus | 1,091 | 0,955 | 0,996 | 0,949 | 0,601 | 1,178 | 1,038 | 1,221 | 1,303 | 1,007 | 0,791 | 0,857 | 1,046 | 0,832 | 1,184 | 0,950 | 11854 | 0,266 | 0,270 | 0,243 | 0,221 |
| | FJ361768.1/FJ361769.1 | WYMV | Wheat yellow mosaic virus | 1,046 | 0,890 | 0,986 | 1,097 | 0,620 | 1,202 | 1,081 | 1,123 | 1,203 | 1,058 | 0,850 | 0,873 | 1,137 | 0,815 | 1,118 | 0,898 | 7300 | 0,261 | 0,255 | 0,276 | 0,208 |
| Ipomovirus | GU563327.1 | CBSV | Cassava brown streak virus | 1,042 | 0,949 | 0,937 | 1,043 | 0,618 | 1,146 | 1,073 | 1,279 | 1,271 | 0,944 | 1,025 | 0,700 | 1,210 | 0,935 | 0,984 | 0,815 | 8995 | 0,318 | 0,281 | 0,153 | 0,249 |
| | KU935732.1 | CocMoV | Coccinia mottle virus | 1,078 | 0,942 | 0,869 | 1,041 | 0,550 | 1,233 | 1,209 | 1,268 | 1,210 | 0,910 | 0,999 | 0,677 | 1,225 | 0,881 | 0,950 | 0,855 | 9778 | 0,333 | 0,268 | 0,155 | 0,243 |
| | AY578085.1 | CVYV | Cucumber vein yellowing virus | 1,075 | 0,961 | 0,939 | 0,984 | 0,580 | 1,219 | 1,081 | 1,265 | 1,233 | 0,898 | 1,007 | 0,799 | 1,188 | 0,889 | 0,990 | 0,877 | 9751 | 0,324 | 0,262 | 0,167 | 0,247 |
| | HQ840786.2 | EMLMV | Eggplant mild leaf mottle virus | 1,052 | 0,899 | 0,935 | 1,089 | 0,617 | 1,182 | 1,013 | 1,243 | 1,351 | 0,988 | 0,951 | 0,641 | 1,096 | 0,936 | 1,094 | 0,892 | 9280 | 0,297 | 0,268 | 0,177 | 0,259 |
| | EU259611.1 | SqVYV | Squash vein yellowing virus | 1,099 | 0,993 | 0,885 | 0,959 | 0,561 | 1,183 | 1,131 | 1,267 | 1,231 | 0,984 | 0,942 | 0,750 | 1,191 | 0,816 | 1,050 | 0,915 | 9836 | 0,320 | 0,268 | 0,173 | 0,240 |
| | 2733241.1 | SPMMV | Sweet potato mild mottle virus | 1,089 | 0,988 | 0,970 | 0,923 | 0,602 | 1,223 | 0,938 | 1,308 | 1,355 | 0,891 | 0,845 | 0,784 | 1,054 | 0,856 | 1,219 | 0,926 | 10818 | 0,309 | 0,264 | 0,181 | 0,246 |
| | HE600072.1 | ToMMV | Tomato mild mottle virus | 1,103 | 0,925 | 0,905 | 1,025 | 0,592 | 1,199 | 0,984 | 1,263 | 1,355 | 0,947 | 0,997 | 0,653 | 1,086 | 0,908 | 1,128 | 0,917 | 9281 | 0,296 | 0,277 | 0,168 | 0,260 |
| | NC_014791.1 | UCBSV | Ugandan cassava brown streak virus | 1,012 | 0,974 | 0,878 | 1,087 | 0,645 | 1,162 | 1,071 | 1,238 | 1,369 | 0,914 | 1,053 | 0,579 | 1,189 | 0,893 | 1,047 | 0,849 | 9070 | 0,324 | 0,290 | 0,143 | 0,244 |
| Macluravirus | MG978107.1 | AlpMV | Alpinia oxyphylla mosaic virus | 1,079 | 0,936 | 1,097 | 0,871 | 0,513 | 1,300 | 0,961 | 1,422 | 1,488 | 0,886 | 0,665 | 0,668 | 1,072 | 0,814 | 1,195 | 0,952 | 8213 | 0,333 | 0,272 | 0,186 | 0,209 |
| | KP405232.1 | ArtLV | Artichoke latent virus | 1,070 | 0,996 | 1,046 | 0,877 | 0,536 | 1,135 | 1,035 | 1,430 | 1,352 | 0,965 | 0,748 | 0,801 | 1,071 | 0,883 | 1,128 | 0,916 | 8287 | 0,301 | 0,244 | 0,213 | 0,242 |
| | KU053507.1 | BLDVA | Broad-leafed dock virus A | 1,077 | 0,932 | 0,977 | 0,990 | 0,526 | 1,230 | 0,944 | 1,413 | 1,391 | 1,001 | 0,882 | 0,607 | 1,042 | 0,856 | 1,184 | 0,938 | 8163 | 0,309 | 0,241 | 0,207 | 0,243 |
| | MF622947.1 | CaMV | Cardamom mosaic virus | 1,050 | 0,916 | 1,105 | 0,937 | 0,586 | 1,314 | 0,890 | 1,318 | 1,459 | 0,890 | 0,746 | 0,686 | 1,037 | 0,829 | 1,207 | 0,976 | 8249 | 0,320 | 0,271 | 0,193 | 0,216 |
| | AB710145.1 | ChYNMV | Chinise yam necrotic mosaic virus | 1,112 | 0,932 | 1,061 | 0,868 | 0,475 | 1,270 | 1,007 | 1,431 | 1,437 | 0,923 | 0,687 | 0,750 | 1,073 | 0,851 | 1,182 | 0,907 | 8224 | 0,317 | 0,261 | 0,198 | 0,224 |
| | KX979913.1 | NaLV | Narcissus latent virus | 1,069 | 0,964 | 1,021 | 0,934 | 0,550 | 1,261 | 0,950 | 1,237 | 1,378 | 0,925 | 0,837 | 0,797 | 1,030 | 0,937 | 1,197 | 0,930 | 8177 | 0,298 | 0,263 | 0,201 | 0,240 |
| | MF072318.1 | YCNMV | Yam chlorotic necrosis mosaic virus | 1,118 | 0,981 | 1,026 | 0,833 | 0,466 | 1,222 | 1,027 | 1,475 | 1,496 | 0,881 | 0,683 | 0,698 | 1,065 | 0,855 | 1,198 | 0,915 | 8199 | 0,320 | 0,271 | 0,187 | 0,222 |
| Poacevirus | JX156425.1 | CaSVA | Caladenia virus A | 1,051 | 0,910 | 1,077 | 0,969 | 0,723 | 1,249 | 0,872 | 1,187 | 1,310 | 0,849 | 0,856 | 0,892 | 0,989 | 0,962 | 1,167 | 0,914 | 9839 | 0,304 | 0,268 | 0,198 | 0,229 |
| | GQ388116.1 | SSMV | Sugarcane streak mosaic virus | 0,976 | 1,020 | 1,109 | 0,911 | 0,664 | 1,214 | 1,001 | 1,227 | 1,300 | 0,910 | 0,768 | 0,898 | 1,135 | 0,813 | 1,063 | 0,963 | 9781 | 0,314 | 0,254 | 0,207 | 0,225 |
| | FJ263671.1 | TriMV | Triticum mosaic virus | 1,015 | 0,917 | 1,135 | 0,976 | 0,767 | 1,261 | 0,847 | 1,176 | 1,348 | 1,060 | 0,969 | 1,130 | 0,862 | 10282 | 0,905 | 0,880 | 0,878 | 0,280 | 0,178 | 0,237 | |
| Potyvirus | MF997470.1 | AfEMV | African eggplant mosaic virus | 1,006 | 0,980 | 0,984 | 1,027 | 0,604 | 1,108 | 1,072 | 1,360 | 1,427 | 1,046 | 0,756 | 0,570 | 1,078 | 0,872 | 1,143 | 0,919 | 9646 | 0,317 | 0,257 | 0,191 | 0,234 |
| | EU410442.1 | AlWMV | Algerian watermelon mosaic virus | 1,059 | 0,972 | 0,966 | 0,978 | 0,619 | 1,209 | 1,064 | 1,226 | 1,328 | 0,962 | 0,819 | 0,750 | 1,074 | 0,837 | 1,125 | 0,983 | 9795 | 0,314 | 0,262 | 0,191 | 0,233 |
| | HM363516.1 | ApVY | Apium virus Y | 1,009 | 0,972 | 1,079 | 0,955 | 0,652 | 1,135 | 1,048 | 1,330 | 1,336 | 0,932 | 0,797 | 0,736 | 1,115 | 0,942 | 0,991 | 0,902 | 9917 | 0,337 | 0,258 | 0,182 | 0,223 |
| | DQ925486.2 | ArMV | Arracacha mottle virus | 0,979 | 1,040 | 0,947 | 1,023 | 0,673 | 1,156 | 1,039 | 1,258 | 1,399 | 0,907 | 0,765 | 0,720 | 1,120 | 0,830 | 1,203 | 0,880 | 9630 | 0,326 | 0,272 | 0,170 | 0,231 |
| | KJ830760.1 | AsV1 | Asparagus virus 1 | 1,013 | 0,940 | 1,096 | 0,972 | 0,557 | 1,247 | 1,081 | 1,301 | 1,432 | 0,915 | 0,717 | 0,693 | 1,141 | 0,868 | 1,002 | 0,946 | 9741 | 0,330 | 0,263 | 0,188 | 0,219 |
| | DQ851496.1 | BaBrMV | Banana bract mosaic virus | 0,996 | 1,062 | 1,029 | 0,910 | 0,725 | 1,105 | 0,965 | 1,275 | 1,340 | 0,893 | 0,810 | 0,817 | 1,059 | 0,879 | 1,152 | 0,943 | 9711 | 0,313 | 0,272 | 0,183 | 0,232 |
| | KU685505.1 | BaVY | Barbacena virus Y | 1,013 | 0,960 | 0,996 | 1,031 | 0,650 | 1,129 | 1,000 | 1,340 | 1,406 | 0,959 | 0,864 | 0,591 | 1,059 | 0,941 | 1,114 | 0,894 | 9837 | 0,321 | 0,265 | 0,184 | 0,230 |
| | NC_009741.1 | BaBMV | Basella rugose mosaic virus | 1,099 | 0,979 | 0,960 | 1,057 | 0,648 | 1,166 | 0,994 | 1,378 | 1,420 | 0,863 | 0,665 | 1,105 | 0,828 | 1,169 | 0,920 | 0,980 | 9804 | 0,322 | 0,264 | 0,180 | 0,234 |
| | AY864314.2 | BeCMNV | Bean common mosaic necrotic virus | 1,044 | 0,918 | 1,008 | 1,024 | 0,594 | 1,190 | 0,973 | 1,363 | 1,384 | 1,053 | 0,848 | 0,541 | 1,083 | 0,863 | 1,138 | 0,931 | 9893 | 0,320 | 0,258 | 0,185 | 0,237 |
| | AJ312437.1 | BeCMV | Bean common mosaic virus | 1,002 | 0,948 | 1,020 | 1,039 | 0,556 | 1,188 | 1,031 | 1,381 | 1,500 | 0,990 | 0,825 | 0,465 | 1,086 | 0,881 | 1,074 | 0,953 | 9992 | 0,325 | 0,253 | 0,182 | 0,240 |
| | NC_003492.1 | BeYMV | Bean yellow mosaic virus | 1,020 | 0,920 | 1,005 | 1,057 | 0,605 | 1,245 | 0,974 | 1,298 | 1,412 | 0,967 | 0,912 | 0,529 | 1,098 | 0,864 | 1,089 | 0,946 | 9532 | 0,327 | 0,261 | 0,178 | 0,235 |
| | KY012334.1 | BtMV | Beet mosaic virus | 0,977 | 0,970 | 0,990 | 1,071 | 0,562 | 1,197 | 1,101 | 1,276 | 1,393 | 0,995 | 0,781 | 0,681 | 1,154 | 0,840 | 1,093 | 0,891 | 9591 | 0,310 | 0,249 | 0,201 | 0,240 |
| | KF649336.1 | BiMV | Bidens mosaic virus | 1,038 | 0,907 | 1,093 | 0,979 | 0,623 | 1,251 | 1,031 | 1,221 | 1,370 | 0,909 | 0,663 | 0,851 | 1,085 | 0,914 | 1,104 | 0,895 | 9556 | 0,324 | 0,265 | 0,184 | 0,227 |
| | AF538686.2 | BiMotV | Bidens mottle virus | 1,048 | 0,927 | 1,055 | 0,964 | 0,628 | 1,204 | 1,070 | 1,247 | 1,349 | 0,943 | 0,750 | 0,778 | 1,052 | 0,917 | 1,065 | 0,963 | 9741 | 0,324 | 0,260 | 0,199 | 0,217 |
| | JQ807995.1 | BluSVA | Blue squill virus A | 1,022 | 0,947 | 1,086 | 0,966 | 0,553 | 1,189 | 1,028 | 1,336 | 1,486 | 0,963 | 0,682 | 0,669 | 1,084 | 0,896 | 1,096 | 0,933 | 9842 | 0,309 | 0,259 | 0,181 | 0,250 |
| | JX867236.1 | BruMV | Brugmansia mosaic virus | 0,997 | 0,963 | 0,985 | 1,057 | 0,645 | 1,135 | 1,046 | 1,359 | 1,374 | 1,063 | 0,844 | 0,718 | 1,125 | 0,850 | 1,088 | 0,930 | 9796 | 0,326 | 0,266 | 0,176 | 0,232 |
| | AB551370.1 | BsMoV | Brugmansia suaveolens mottle virus | 1,022 | 1,012 | 1,018 | 0,936 | 0,628 | 1,119 | 1,030 | 1,414 | 1,379 | 0,986 | 0,994 | 0,420 | 1,098 | 0,848 | 0,938 | 1,087 | 9868 | 0,338 | 0,264 | 0,183 | 0,215 |
| | EF105297.1 | CaLLV | Calla lily latent virus | 1,032 | 0,956 | 0,969 | 1,028 | 0,625 | 1,206 | 0,981 | 1,280 | 1,451 | 0,972 | 0,833 | 0,564 | 1,038 | 0,855 | 1,184 | 0,975 | 9731 | 0,317 | 0,264 | 0,176 | 0,243 |
| | KX013584.1 | CoCSV | Callistephus mosaic virus | 0,984 | 0,986 | 1,099 | 0,954 | 0,722 | 1,089 | 0,960 | 1,341 | 1,383 | 0,903 | 0,792 | 0,728 | 1,011 | 1,002 | 1,083 | 0,910 | 9859 | 0,327 | 0,258 | 0,193 | 0,222 |
| | GQ421689.2 | CaYSV | Canna yellow streak virus | 1,030 | 0,983 | 1,102 | 0,889 | 0,639 | 1,217 | 0,939 | 1,344 | 1,354 | 0,836 | 0,733 | 0,885 | 1,061 | 0,922 | 1,145 | 0,876 | 9501 | 0,333 | 0,253 | 0,190 | 0,224 |
| | JX156434.1 | CaTLV | Carrot thin leaf virus | 0,980 | 0,950 | 1,031 | 1,060 | 0,645 | 1,204 | 1,015 | 1,287 | 1,402 | 0,951 | 0,816 | 0,610 | 1,097 | 0,889 | 1,086 | 0,909 | 9491 | 0,337 | 0,251 | 0,183 | 0,229 |
| | KP343681.1 | CatMV | Catharanthus mosaic virus | 0,985 | 0,934 | 1,082 | 1,038 | 0,698 | 1,158 | 0,979 | 1,293 | 1,385 | 0,981 | 0,804 | 0,587 | 1,073 | 0,927 | 1,061 | 0,926 | 9575 | 0,337 | 0,265 | 0,180 | 0,218 |
| | HQ676607.1 | CeMV | Celery mosaic virus | 1,019 | 0,954 | 0,987 | 1,034 | 0,653 | 1,195 | 1,029 | 1,418 | 1,396 | 0,896 | 0,851 | 0,624 | 1,038 | 0,929 | 1,096 | 0,950 | 9999 | 0,334 | 0,258 | 0,178 | 0,230 |
| | JN008909.1 | ChiRSV | Chilli ringspot virus | 1,008 | 0,939 | 0,980 | 1,075 | 0,660 | 1,124 | 1,065 | 1,299 | 1,396 | 0,992 | 0,834 | 0,578 | 1,035 | 0,953 | 1,100 | 0,916 | 9595 | 0,326 | 0,256 | 0,195 | 0,223 |
| | AJ237843.3 | ChVMV | Chilli veinal mottle virus | 0,992 | 1,007 | 0,950 | 1,043 | 0,623 | 1,148 | 1,069 | 1,290 | 1,432 | 0,872 | 0,885 | 0,651 | 1,092 | 0,924 | 1,085 | 0,892 | 9711 | 0,315 | 0,267 | 0,189 | 0,229 |
| | AB011819.1 | CloYVV | Clover yellow vein virus | 1,005 | 0,906 | 0,969 | 1,123 | 0,579 | 1,215 | 1,048 | 1,331 | 1,529 | 0,937 | 0,895 | 0,337 | 1,052 | 0,945 | 1,074 | 0,928 | 9584 | 0,333 | 0,257 | 0,179 | 0,231 |
| | AF499738.1 | CocSV | Cocksfoot stripe virus | 1,026 | 1,003 | 0,992 | 0,971 | 0,608 | 1,133 | 1,114 | 1,258 | 1,252 | 0,958 | 0,804 | 0,885 | 1,129 | 0,895 | 1,076 | 0,876 | 9663 | 0,298 | 0,249 | 0,221 | 0,232 |
| | JQ801448.1 | ColDV | Colombian datura virus | 1,012 | 0,959 | 1,036 | 1,005 | 0,580 | 1,152 | 1,011 | 1,414 | 1,493 | 0,991 | 0,762 | 0,489 | 1,102 | 0,878 | 1,130 | 0,895 | 9621 | 0,322 | 0,276 | 0,181 | 0,221 |
| | AF348210.1 | CowABMV | Cowpea aphid-borne mosaic virus | 1,023 | 0,912 | 0,972 | 1,088 | 0,578 | 1,210 | 1,066 | 1,330 | 1,421 | 1,061 | 0,866 | 0,450 | 1,088 | 0,845 | 1,076 | 0,985 | 9465 | 0,327 | 0,253 | 0,188 | 0,232 |
| | KY657266.1 | CvBV | Cucurbit vein banding virus | 1,046 | 1,000 | 0,991 | 0,945 | 0,634 | 1,152 | 1,060 | 1,273 | 1,336 | 0,891 | 0,858 | 0,785 | 1,097 | 0,908 | 1,060 | 0,926 | 9968 | 0,311 | 0,274 | 0,191 | 0,224 |
| | JQ723475.1 | CyrEVA | Cyrtanthus elatus virus A | 0,990 | 0,981 | 1,097 | 0,964 | 0,642 | 1,178 | 1,029 | 1,321 | 1,421 | 0,890 | 0,763 | 0,913 | 1,014 | 0,863 | 1,163 | 0,913 | 9908 | 0,323 | 0,259 | 0,177 | 0,241 |
| | DQ299908.1 | DapMV | Daphne mosaic virus | 1,010 | 1,021 | 0,972 | 0,988 | 0,594 | 1,234 | 1,056 | 1,234 | 1,323 | 0,892 | 0,720 | 0,925 | 1,132 | 0,828 | 1,205 | 0,842 | 9548 | 0,311 | 0,245 | 0,198 | 0,246 |
| | KU556609.1 | DapVY | Daphne virus Y | 1,027 | 0,983 | 0,979 | 1,001 | 0,601 | 1,230 | 1,055 | 1,197 | 1,271 | 0,946 | 0,705 | 0,957 | 1,148 | 0,843 | 1,185 | 0,847 | 9448 | 0,299 | 0,247 | 0,189 | 0,265 |
| | AJ298033.1 | DasMV | Dasheen mosaic virus | 1,067 | 0,961 | 0,970 | 0,974 | 0,726 | 1,156 | 0,939 | 1,259 | 1,293 | 0,971 | 0,960 | 0,662 | 0,956 | 0,908 | 1,142 | 1,041 | 10038 | 0,319 | 0,253 | 0,197 | 0,231 |
| | JX156422.1 | DoCVA | Donkey orchid virus A | 1,050 | 0,947 | 1,115 | 0,922 | 0,613 | 1,181 | 0,981 | 1,296 | 1,361 | 0,933 | 0,807 | 0,748 | 1,148 | 0,901 | 1,007 | 0,923 | 9868 | 0,329 | 0,284 | 0,164 | 0,243 |
| | AB246773.1 | EaAPV | East asian passiflora virus | 1,057 | 0,948 | 0,984 | 0,996 | 0,553 | 1,190 | 1,015 | 1,370 | 1,443 | 0,988 | 0,899 | 0,501 | 1,087 | 0,866 | 1,083 | 0,972 | 10046 | 0,316 | 0,266 | 0,181 | 0,237 |
| | KU941946.1 | EndNMV | Endive necrotic mosaic virus | 1,005 | 1,056 | 1,073 | 0,872 | 0,598 | 1,186 | 1,037 | 1,352 | 1,397 | 0,851 | 0,725 | 0,838 | 1,009 | 0,882 | 1,116 | 0,994 | 10000 | 0,328 | 0,222 | 0,215 | 0,234 |
| | KX355613.1 | EuRV | Euphorbia ringspot virus | 1,003 | 1,014 | 0,993 | 0,985 | 0,562 | 1,237 | 1,114 | 1,351 | 1,489 | 0,774 | 0,779 | 0,639 | 1,107 | 0,885 | 1,064 | 0,908 | 10147 | 0,355 | 0,254 | 0,178 | 0,213 |
| | FM206346.1 | FreMV | Freesia mosaic virus | 1,021 | 1,039 | 1,076 | 0,883 | 0,643 | 1,191 | 0,951 | 1,275 | 1,360 | 0,855 | 0,734 | 0,691 | 1,092 | 0,857 | 1,140 | 0,938 | 9489 | 0,311 | 0,260 | 0,175 | 0,254 |
| | AM039800.1 | FrVY | Fritillary virus Y | 0,994 | 1,014 | 0,955 | 1,028 | 0,657 | 1,166 | 1,034 | 1,246 | 1,407 | 0,910 | 0,818 | 0,704 | 1,056 | 0,876 | 1,164 | 0,933 | 9656 | 0,316 | 0,256 | 0,186 | 0,242 |
| | EF427894.1 | GloSMV | Gloriosa stripe mosaic virus | 1,002 | 1,036 | 1,077 | 0,884 | 0,672 | 1,136 | 0,996 | 1,314 | 1,446 | 0,833 | 0,730 | 0,794 | 1,002 | 0,931 | 1,129 | 0,969 | 9455 | 0,319 | 0,267 | 0,194 | 0,220 |
| | LC228573.1 | GoMV | Gomphocarpus mosaic virus | 1,073 | 0,922 | 0,977 | 1,007 | 0,460 | 1,177 | 1,165 | 1,391 | 1,490 | 1,061 | 0,786 | 0,434 | 1,102 | 0,863 | 1,021 | 0,998 | 9998 | 0,315 | 0,259 | 0,188 | 0,238 |
| | AB818538.1 | HaMV | Habenaria mosaic virus | 0,960 | 0,993 | 1,123 | 0,958 | 0,754 | 1,157 | 0,914 | 1,243 | 1,342 | 0,846 | 0,735 | 0,824 | 1,027 | 0,972 | 1,152 | 0,861 | 9499 | 0,318 | 0,251 | 0,199 | 0,231 |
| | HQ161081.1 | HarMV | Hardenbergia mosaic virus | 1,048 | 0,915 | 0,989 | 1,036 | 0,556 | 1,153 | 1,061 | 1,400 | 1,442 | 1,128 | 0,776 | 0,417 | 1,082 | 0,845 | 1,124 | 0,963 | 9682 | 0,324 | 0,261 | 0,184 | 0,232 |
| | MH779476.1 | HenMV | Henbane mosaic virus | 1,017 | 1,031 | 0,997 | 0,946 | 0,655 | 1,079 | 0,978 | 1,414 | 1,371 | 0,974 | 0,812 | 0,691 | 1,008 | 0,895 | 1,206 | 0,908 | 10140 | 0,313 | 0,250 | 0,213 | 0,224 |
| | JQ395040.1 | HipMV | Hippeastrum mosaic virus | 1,035 | 0,956 | 0,999 | 1,004 | 0,589 | 1,241 | 1,003 | 1,242 | 1,386 | 0,917 | 0,786 | 0,776 | 1,115 | 0,855 | 1,156 | 0,900 | 9660 | 0,303 | 0,267 | 0,183 | 0,247 |
| | KY828925.2 | HyaMV | Hyacinth mosaic virus | 1,003 | 1,016 | 1,099 | 0,906 | 0,648 | 1,213 | 0,909 | 1,294 | 1,432 | 0,803 | 0,838 | 0,722 | 1,061 | 0,894 | 1,091 | 0,969 | 9500 | 0,315 | 0,263 | 0,178 | 0,243 |
| | KU981084.1 | ImpFBV | Impatiens flower break potyvirus | 1,061 | 0,974 | 1,025 | 0,927 | 0,700 | 1,160 | 0,966 | 1,257 | 1,313 | 0,907 | 0,842 | 0,788 | 1,040 | 0,913 | 1,128 | 0,953 | 9622 | 0,323 | 0,278 | 0,173 | 0,226 |
| | NC_018833.1 | IJMV | Iranian johnsongrass mosaic virus | 1,015 | 0,974 | 1,078 | 0,936 | 0,645 | 1,238 | 1,058 | 1,241 | 1,336 | 0,851 | 0,752 | 0,859 | 1,082 | 0,901 | 1,035 | 0,952 | 9544 | 0,343 | 0,249 | 0,195 | 0,213 |
| | JF310812.1 | IrMMV | Iris mild mosaic virus | 0,951 | 1,000 | 1,183 | 0,910 | 0,813 | 1,110 | 0,820 | 1,291 | 1,308 | 0,867 | 0,792 | 0,905 | 1,030 | 0,983 | 1,141 | 0,856 | 8651 | 0,316 | 0,257 | 0,193 | 0,221 |
| | KT692938.1 | IrSMV | Iris severe mosaic virus | 1,061 | 0,970 | 1,062 | 0,884 | 0,586 | 1,203 | 1,019 | 1,409 | 1,366 | 0,941 | 0,738 | 0,679 | 1,083 | 0,855 | 1,089 | 0,964 | 10423 | 0,354 | 0,257 | 0,174 | 0,215 |
| | AB027007.1 | JapYMV | Japanese mild mosaic virus | 1,017 | 0,976 | 1,057 | 0,953 | 0,596 | 1,193 | 1,084 | 1,338 | 1,432 | 0,877 | 0,739 | 0,693 | 1,053 | 0,929 | 1,043 | 0,961 | 9760 | 0,342 | 0,246 | 0,190 | 0,222 |
| | KT222674.1 | JasRV | Jasmine ringspot virus | 1,015 | 0,991 | 1,046 | 0,952 | 0,658 | 1,137 | 1,035 | 1,288 | 1,319 | 0,990 | 0,751 | 0,780 | 1,092 | 0,871 | 1,101 | 0,933 | 9590 | 0,320 | 0,254 | 0,190 | 0,236 |
| | Z26920.1 | JoMV | Johnson grass mosaic virus | 0,936 | 1,048 | 1,070 | 0,987 | 0,661 | 1,112 | 1,058 | 1,328 | 1,392 | 0,897 | 0,756 | 0,723 | 1,109 | 0,879 | 1,047 | 0,920 | 9779 | 0,343 | 0,235 | 0,197 | 0,224 |
| | KY385304.1 | KaMV | Kalanchoe mosaic virus | 1,043 | 0,976 | 1,062 | 0,907 | 0,697 | 1,163 | 0,965 | 1,300 | 1,283 | 0,927 | 0,806 | 0,836 | 1,034 | 0,914 | 1,122 | 0,940 | 9462 | 0,329 | 0,254 | 0,198 | 0,219 |
| | JF838187.1 | KjMV | Keunjorong mosaic virus | 1,078 | 0,919 | 1,000 | 0,987 | 0,581 | 1,255 | 0,993 | 1,264 | 1,306 | 0,989 | 0,888 | 0,715 | 1,105 | 0,841 | 1,097 | 0,961 | 9626 | 0,307 | 0,258 | 0,191 | 0,244 |
| | AB219545.1 | KoMV | Konjac mosaic virus | 0,965 | 0,997 | 1,048 | 1,012 | 0,630 | 1,220 | 0,939 | 1,312 | 1,475 | 0,853 | 0,859 | 0,635 | 1,050 | 0,896 | 1,110 | 0,953 | 9544 | 0,320 | 0,247 | 0,190 | 0,243 |
| | AJ307057.1 | LeYSV | Leek yellow stripe potyvirus | 0,968 | 0,996 | 1,081 | 0,983 | 0,745 | 1,127 | 0,960 | 1,342 | 1,332 | 0,941 | 0,771 | 0,804 | 1,060 | 0,891 | 1,137 | 0,910 | 10142 | 0,314 | 0,261 | 0,189 | 0,236 |
| | KP769852.1 | LeINV | Lettuce italian necrotic virus | 0,964 | 1,012 | 1,087 | 0,970 | 0,650 | 1,152 | 1,007 | 1,348 | 1,449 | 0,842 | 0,780 | 0,687 | 1,085 | 0,938 | 1,044 | 0,904 | 9829 | 0,336 | 0,257 | 0,185 | 0,222 |
| | X97705.1 | LeMV | Lettuce mosaic virus | 0,997 | 0,969 | 1,052 | 0,987 | 0,683 | 1,171 | 1,129 | 1,164 | 1,266 | 0,961 | 0,809 | 0,837 | 1,064 | 0,918 | 1,078 | 1,009 | 10080 | 0,329 | 0,223 | 0,212 | 0,237 |
| | AM048875.1 | LiMoV | Lily mottle virus | 0,980 | 0,984 | 1,120 | 0,929 | 0,688 | 1,092 | 0,994 | 1,293 | 1,285 | 1,035 | 0,728 | 0,877 | 1,052 | 0,902 | 1,112 | 0,927 | 9648 | 0,295 | 0,230 | 0,227 | 0,248 |
| | MF543013.1 | LiYMV | Lily yellow mosaic virus | 0,900 | 1,087 | 1,114 | 0,946 | 0,777 | 1,077 | 0,929 | 1,264 | 1,260 | 0,857 | 0,803 | 0,853 | 1,047 | 0,934 | 1,091 | 0,929 | 9811 | 0,309 | 0,241 | 0,204 | 0,246 |
| | EU847625.2 | LuMV | Lupine mosaic virus | 0,958 | 1,037 | 1,072 | 0,964 | 0,718 | 1,094 | 0,982 | 1,355 | 1,466 | 0,906 | 0,772 | 0,558 | 1,009 | 0,908 | 1,096 | 1,013 | 10113 | 0,348 | 0,253 | 0,181 | 0,219 |
| | AM110758.1 | MDMV | Maize dwarf mosaic virus | 1,015 | 0,982 | 1,046 | 0,956 | 0,660 | 1,167 | 1,029 | 1,314 | 1,341 | 0,928 | 0,771 | 0,754 | 1,075 | 0,894 | 1,100 | 0,918 | 9523 | 0,338 | 0,255 | 0,193 | 0,214 |
| | EF579955.1 | MWMV | Moroccan watermelon mosaic virus | 1,043 | 0,941 | 0,956 | 1,042 | 0,618 | 1,229 | 1,067 | 1,208 | 1,317 | 0,954 | 0,823 | 0,763 | 1,116 | 0,858 | 1,128 | 0,899 | 9730 | 0,317 | 0,263 | 0,188 | 0,232 |
| | AM182028.1 | NarDV | Narcissus degeneration virus | 1,050 | 1,002 | 0,978 | 0,947 | 0,708 | 1,132 | 1,035 | 1,238 | 1,238 | 0,921 | 0,790 | 0,613 | 1,085 | 0,909 | 1,145 | 0,880 | 9816 | 0,326 | 0,265 | 0,172 | 0,237 |
| | KC691259.1 | NarLSYV | Narcissus late season yellows virus | 1,007 | 0,989 | 1,113 | 0,904 | 0,654 | 1,175 | 0,984 | 1,303 | 1,357 | 0,925 | 0,734 | 0,822 | 1,042 | 0,898 | 1,091 | 0,970 | 9687 | 0,319 | 0,244 | 0,203 | 0,235 |
| | AM158908.1 | NaYSV1 | Narcissus yellow stripe virus 1 | 0,984 | 0,978 | 1,154 | 0,912 | 0,642 | 1,198 | 0,997 | 1,308 | 1,362 | 0,936 | 0,740 | 0,778 | 1,080 | 0,881 | 1,011 | 0,999 | 9650 | 0,328 | 0,240 | 0,201 | 0,230 |
| | AJS10223.1 | OnYDV | Onion yellow dwarf virus | 0,992 | 1,036 | 1,116 | 0,877 | 0,765 | 1,084 | 0,985 | 1,278 | 1,256 | 0,876 | 0,737 | 0,958 | 1,098 | 0,939 | 1,047 | 0,884 | 10538 | 0,341 | 0,268 | 0,173 | 0,217 |
| | JQ807997.1 | OrMV | Ornithogalum mosaic virus | 1,035 | 0,956 | 1,057 | 0,956 | 0,661 | 1,227 | 1,017 | 1,291 | 1,376 | 0,892 | 0,874 | 1,111 | 0,929 | 0,945 | 1,119 | 0,929 | 9445 | 0,319 | 0,265 | 0,185 | 0,231 |
| | GQ916624.1 | PanVY | Panax virus Y | 1,010 | 0,968 | 1,044 | 0,988 | 0,736 | 1,137 | 1,015 | 1,219 | 1,292 | 0,925 | 0,852 | 0,775 | 1,064 | 0,944 | 1,037 | 0,939 | 9750 | 0,332 | 0,266 | 0,180 | 0,222 |
| | AB088221.1 | PapLDMV | Papaya leaf distortion mosaic virus | 1,038 | 0,984 | 0,939 | 1,011 | 0,665 | 1,202 | 1,060 | 1,213 | 1,311 | 0,905 | 0,876 | 0,746 | 1,108 | 0,853 | 1,116 | 0,925 | 10153 | 0,334 | 0,270 | 0,174 | 0,222 |
| | X67673.1 | PapRV | Papaya ringspot Virus | 1,069 | 0,940 | 0,975 | 0,996 | 0,625 | 1,169 | 1,061 | 1,253 | 1,261 | 1,023 | 0,858 | 0,739 | 1,136 | 0,869 | 1,071 | 0,916 | 10326 | 0,312 | 0,270 | 0,180 | 0,238 |
| | MF509898.1 | PMNV | Paris mosaic necrosis virus | 1,023 | 1,010 | 0,972 | 0,978 | 0,546 | 1,235 | 1,046 | 1,303 | 1,446 | 0,847 | 0,846 | 0,684 | 1,041 | 0,951 | 1,061 | 0,955 | 9660 | 0,328 | 0,258 | 0,181 | 0,233 |
| | HQ122652.2 | PasFWV | Passion fruit woodiness virus | 0,997 | 0,946 | 1,046 | 1,028 | 0,544 | 1,184 | 1,037 | 1,399 | 1,514 | 0,984 | 0,799 | 0,461 | 1,114 | 0,884 | 1,052 | 0,933 | 9680 | 0