

Table 2. Four characteristics of five orders are compared. Four orders in phylum Spirochaetes share the same helical cell shape. Order Leptospirales has no hooked ends which is totally different from the other three orders in phylum Spirochaetes. Besides, the Periplasmic flagella of Spirochaetales, Brachyspirales and Brevinematales is overlapped and located in the central region of the cell. Finally, Species in Leptospirales are Aerobic or at least microaerophilic, which is not the fact in the other three orders in phylum Spirochaetes, where species are usually Anaerobic or microaerophilic at most. As for order Oligoflexia in phylum Proteobacteria, it is also quite different from order Leptospirales among these characteristics.

Order	Shape	Hooked ends	Periplasmic flagella	Habit
Spirochaetales	Helical, coccoid	No	Central, overlapped	Anaerobic, microaerophilic
Brachyspirales	Helical	No	Central, overlapped	Anaerobic
Brevinematales	Helical	No	Central, overlapped	Microaerophilic
Leptospirales	Helical	Yes	Central, not overlapped	Aerobic, microaerophilic
Oligoflexia[20]	Pleiomorphic	-	No	Aerobic