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Characterization of *Legionella* Species by Numerical Analysis of Whole-Cell Protein Electrophoresis

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The results of a computer-assisted whole-cell protein sodium dodecyl sulfate-polyacrylamide gel electrophoresis (SDS-PAGE) analysis of 291 isolates and 74 reference strains belonging to all known species of the genus *Legionella* revealed that the majority of the species of this genus can be adequately identified by this method. The type strain of *Legionella bozemanii* did not cluster with the other strains of this species, and the only strain of *Legionella geestiana* available clustered with the strains of *Legionella feeleii*. When we performed a numerical analysis by omitting certain portions of the pattern containing dense bands, all of the species could be distinguished. Our results also show that the type strains of *Legionella nautarum* and *Legionella londiniensis* deposited in the National Collection of Type Cultures do not correspond to the type strains deposited in the American Type Culture Collection. We used the results of a fatty acid and ubiquinone composition analysis to complement the SDS-PAGE results for several strains whose identities as determined by indirect immunofluorescence were doubtful. Computer-assisted SDS-PAGE of whole-cell proteins can be used in the classification of *Legionella* species and to identify and screen large numbers of isolates for further, in-depth taxonomic studies of smaller numbers of strains.