For the problem of Siegel's zero, we already know the proofs of the Siegel-Tatuzawa theorem for several L-functions. However, such L-functions have a similar property, that they have a pole of odd order at s=1. In this talk, we propose a method to prove the Siegel-Tatuzawa theorem for general L-functions defined by certain Euler products. By using this method, we can obtain the Siegel-Tatuzawa theorem for the symmetric power L-functions with natural assumptions.