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Distribution expansion of a domestically introduced species of mangrove, *Avicennia marina*, a consideration of its impact on the tideland ecosystem in Okinawa Island

Poster Session

Seven species of mangroves, *Bruguiera gymnorrhiza*, *Kandelia obovata*, *Rhizophora mucronata*, *Sonneratia alba*, *Avicennia marina*, *Lumnitzera racemosa* and *Nypa fruticans*, are distributed in Okinawa Prefecture. Among these four species, *B. gymnorrhiza*, *K. candel*, *R. mucronata* and *L. racemosa*, are naturally distributed in the Okinawa Island. However, the distribution of *A. marina*, of which natural northern limit had been in Miyako Island, was discovered in recent year in the Okinawa Island. It is reported that the distribution of mangroves in the tideland of Yohena coast, Yagaji Island in the Okinawa Island, where the distribution expansion of *A. marina* were observed in recent years, based on the line transect study and photograph images analysis (aerial and satellite). Effects of distribution expansion of *A. marina* to the tideland ecosystem of this site are evaluated by sediment particle size composition, organic matter content and infauna species composition, in order to consider the invasion impact of this alien species of mangrove.