Highlights

- We isolated a new polysaccharide gum from the roots of *Acanthophyllum bracteatum*.
- We examined chemical composition and functional properties of the gum.
- The gum had low emulsification properties but moderate foaming capacity.
- Acanthophyllum bracteatum gum is a medium-viscosity polysaccharide.
- Viscosity decreased as temperature increased, and was highest at the neutral state.