The objective of this research were study of sun choke water to extract grass jelly for drying process and study of type and quantity of gelling agent (carrageenan and gum arabic). The 3 volumes of sun choke water were studied that were 1,000, 1,500 and 2,000 ml. and drying with spray-dried process. The results showed that 1,500 ml. of sun choke water was appropriately extracted grass jelly and it is the highest yield of grass jelly powder compared to others. Moreover, the difference of gelling agent were studied that were carrageenan and gum Arabic at 4% and 5% respectively. The sample were analyzed by 9 point hedonic scale. The results showed 5% of carrageenan has the highest score in stickiness, texture and overall liking compared to others. Consequently, grass jelly powdered with 5% of carrageenan was suitable to produce instant grass jelly.

**Keyword:** grass jelly, sun choke, gelling agent, spray-dried