

## DP 15

### **Effect of *Lallemantia royleana* (Balangu) seed, salep and carboxymethylcellulose gums on the characteristics of ice cream**

**Haddad Khodaparast MH\***, Bahramparvar M, Razavi SMA

Department of Food Science and Technology, Ferdowsi University of Mashhad,

Khorasan, P.O. Box 91775 – 1163, Iran

\*Email: khodaparast@ferdowsi.um.ac.ir

**Objective:** To determine suitability of two Iranian sources of hydrocolloids namely Balangu seed gum (BSG) and palmate-tuber salep (PTS) as ice cream stabilizers

**Methodology:** Effect of gums (at 0.3, 0.4 and 0.5%) on physicochemical and sensory attributes of a typical soft ice cream and its mix were determined with corresponding carboxymethylcellulose as a commercial stabilizer. Physicochemical characteristics were included of pH, total solids, specific gravity of ice cream mix and overrun and melting resistance of ice cream. In sensory panel, appearance, flavor, body and texture and total acceptance were evaluated.

**Results and conclusion:** BSG and CMC did not make significant differences in most characteristics that meant this Iranian local gum can act as a suitable ice cream stabilizer. Although products prepared using the PTS showed more difference with corresponding CMC, all variations were not significant. Also, the properties of this variety of Iranian salep in ice cream were comparable with other kinds of this extract. Furthermore, because of lower viscosity of ice creams containing salep, higher levels of this gum are proposed.