We claim,

1. Use of *Bacillus Coagulans* SBC37-01, MTCC 5856 containing not less than 2 billion spores in the manufacture of a medicament for amelioration of symptoms associated with diarrhea predominant irritable bowel syndrome (IBS), wherein the medicament is to be administered as a dietary supplement at least 30 minutes before a meal in the morning for a period of 90 days along with standard treatment of care once a day in a manner that a time gap of 4 hours is maintained between the administration of the medicament and the standard treatment of care.

2. The use according to claim 1, wherein the administration of the standard treatment of care comprises Sompraz D containing Domperidone 30mg and 40mg of Esomeprazole and Metrogyl 400 containing Metronidazole 400 mg.