Altai Mountain Country (AMC) is the highest modern uplift among the continental mountain countries in Siberia as well as in Northern and Central Asia in general (Kamelin, 1998). This area occupies about 550000 km² including the Chinese, Kazakh, Mongolian and Russian Altai, as delimited by Kamelin (2005). More than 2700 plant species, 300 of which being endemic, grow on the territory of Altai Mountain Country. In 2002, David Olson and Eric Dinerstein singled Altai-Sayan territory as one of the 200 priority ecoregions of the world for global conservation of biodiversity in their work «The global 200 Priority ecoregions for global conservation» (Olson D., Dinerstein E., 2002).

The biodiversity of the AMC territory has been explored for over 200 years. The first report on the flora of Altai was written by C. F. von Ledebourc and his disciples C. A. von Meyer and A. G. von Bunge and published in 1829 in 4 volumes. The next edition on the flora of Altai under the title “Flora of Altai and Tomsk Province” was completed by P.N. Krylov at the turn of the 20th century. In the modern period, a critical summary “Flora of Western Siberia” touched upon the Russian part of the AMC territory. However, the floristic study of the AMC transboundary territory within the natural botanical and geographical natural borders began 25 years ago by the specialists of the South-Siberian Botanical Garden (ASU, Barnaul) under the guidance of the Botanical Institute n.a. V.L. Komarov (St. Petersburg). The initiators of the “Flora of Altai” project were Professor R.V. Kamelin, a corresponding member of the RAS, PhD, and Director of the SSBG, ASU, A.I. Shmakov, PhD. In a fairly short period, full-scale field research resulted in the collection of the extensive herbarium material, comprising more than 450 thousand specimens (ALTB Herbarium). During the same period, the team of the South Siberian Botanical Garden described new taxa of plants: 3 orders, 1 class, 2 subclasses, 4 families, 5 tribes, 14 genera, 21 intrageneric taxa, 108 species, made more than 150 new nomenclative combinations. In 1998, the botanists-researchers team of Altai established the scientific journal “Turczaninia” in order to present, among other things, the floristic findings to the public. To date, the journal is in demand by the world scientific community, is included in the Scopus and Web of Science (RSCI) citation databases, and has a Q3 level.

Nowadays, the work on a new “Flora of Altai”, the first volume of which came out in 2005, is in progress. At the moment, three volumes are at the stage of high readiness. In 2018, the “Flora Altaica” website (http://altaiflora.asu.ru/en/), whose main purpose was to unite florists and taxonomists focusing their botanical research on the Altai flora, was introduced. In addition, the site is integrated with the ALTB Virtual Herbarium and the GBIF (Global Biodiversity Information Facility). Since 2017, the Altai State University has been the data publishing organization in the GBIF network. The first entries were based on the Virtual Herbarium SSBG (ALTB) materials. Currently 10000 herbarium samples are presented in the GBIF with coordinates, detailed information and photos. In 2019, in the modern GeoJSON specification, the AMC area was zoned into 19 polygons according to botanical and geographical zoning by R.V. Kamelin (Flora Altaica, 2005). Modern GIS services in the collaboration with GBIF will speed up the processes of abstract formation and accumulation of open big data for detailed and accurate maps of the taxa occurrence.

The modern project “Flora of Altai”, guided by the principles of openness, competition and fundamentality, invites the leading botanists of the world to work together on one of the most unique floras of the world.

Acknowledgements: We thank the Russian Foundation for Basic Research (RFBR) research project no. № 19-44-220004_r_a and 18-34-20112).