

**OP28. BRIDGING GAP BETWEEN TRADITION AND FUTURE:
PELARGONIUM GRAVEOLENS ESSENTIAL OIL TARGETED THE
KEY PATHOGENICITY MECHANISMS OF CANDIDA ALBICANS, VIA
MIMICRY OF GASTROINTESTINAL COMPARTMENT AMBIENT
PH ALTERATION**

**Muslime TANRISEVEN¹ , Ahu ÇINAR¹ , Ummu Ozgul KARAGUZEL² ,
Kadriye YUKSEL¹**

¹Bati Akdeniz Agricultural Institute

²The University of Recep Tayyip Erdoğan

Anatolia, the elements that are part of the traditional cultures are now nearly forgotten due to the not be able to be the part of widespread production technologies and the traditional components scientific values are not revealed an not popularized by researchers. *Pelargonium graveolens* L'Hér (PG), one of the irreplaceable component of traditional desserts and syrups with its pleasant and unique fragrance, is one of these valuable elements, and it is known as "İtır" among the Turkish people, especially in the Mediterranean region. This important species of the Geraniaceae family, with its medical and traditional value, still in existence only as a part of historical heritage in certain regions of Türkiye, in the preparation stages of food products and relieving the gastrointestinal (GIS) problem but unfortunately it is fall into oblivion. It is necessary to establish the scientific value of the traditional usage way of these elements and bridging the gap between tradition and the future by use science and technology, so the benefits and the harms of traditional components on human being, and health promotion can be revealed. In this context, PG essential oil and its antimicrobial properties evaluated by aiming transfer the ethnomedical and traditional usage to the future. In order to determined the response of *C. albicans*, which induced health problem throughout the GIS, to PG's essential oil, it was construct and established the experimental models which are able to mimicry the microenvironment of the host GIS compartment, especially in the aspect of ambient pH, and focus on oral mucosa, stomach, intestine and urogenital system pH alteration. We have found that, the special chemotypes of PG's essential oil has different effect, against the key pathogenicity mechanism of *Candida albicans*, adaptation of ambient pH during colonization stages.

Keywords: *Pelargonium*; *Candida*; GI