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S3.4 **Mycoviruses: are they an important issue for the quality control of a fungal collection?**

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Mycoviruses, widespread in all the major fungal family, are viruses able to replicate in fungal cells. In recent years a high number of new viral species were reported mainly from plant pathogenic fungi. This is due to the interest in finding viruses able to cause hypovirulence in their phytopathogenic fungal hosts, or other interesting feature with potential biotechnological applications, such as metabolic variation. We performed an in depth screening of about 200 marine fungi preserved at Mycotheca Universitatis Taurinesis, isolated from different marine matrices searching any kind of mycovirus (encapsidated or capsidless, dsRNA, ssRNA (+/-) and circular ssDNA). About 15% of the fungal strains resulted infected by one or more viruses belonging to different viral families of dsRNA, (+) ssRNA and (-) ssRNA lineages. In specific, one of the fungal isolate, Penicillium aurantiogriseum (MUT4330), hosts six different viruses which we demonstrated to be actively replicating in a single fungal cell. The impact of viruses on the morphological and/or chemical features of the fungal hosts will be shown comparing the results of wild types and semi-cured and or cured strains.