

**Global Youth Science and Technology Bowl (GYSTB) 2021**  
**Award List**  
**Biology and Chemistry (BC) Category**

<b>Award</b>	<b>Team No.</b>	<b>Project Title</b>	<b>Country</b>
Grand Prize - Gold Award	IBBC04	Sustainable Plastic via Clam Shells	Hong Kong
Grand Prize - Gold Award	IBBC26	Fabrication of Eco-friendly Cellulose - Reduced Graphene oxide Hybrid Aerogel from Various Fruit Wastes for Water Purification	Singapore
Grand Prize - Silver Award	IABC16	PaperJuan: The Utilization of Bio-Wax Extracts on Non-Wood Material for Water-resistant Paper Production	Philippines
Grand Prize - Silver Award	IBBC30	Isolation and Characterisation of Human Proteins that Interact with the ORF10 Protein of SARS-COV-2	Singapore
Grand Prize - Bronze Award	IBBC12	Plant Lipase Inhibitor	Hong Kong
Grand Prize - Bronze Award	IBBC18	An Analysis of Physiological and Running Metrics in 3km Cross Country in Comparison to Track and Treadmill	Ireland
First Prize	IABC09	A New Concept of Packaging-Solving the Problem of Excessive Plastic	Macau
First Prize	IBBC05	Synthesis of Nanoparticles for Nitrite and Nitrate Decomposition in Wastewater	Hong Kong
First Prize	IBBC08	Converted Used Paper Into Blossoms	Hong Kong
First Prize	IBBC16	Artificial Intelligence Models for Predicting Statin-Induced Myalgia using Clinical and Genetic Factors	Singapore
Second Prize	IABC06	SMART: Stroke Monitoring and Rehabilitation using Technology	India
Second Prize	IABC11	Sustainable Innovation for Coffee Borer Beetle Control: A Cost Reduction, Safety and High Efficiency Approach for Hypothenemus hampei Protection by Using Spraying Control System for Volatile Oil Extract from Young Citrus Fruit Waste	Thailand

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Second Prize	IBBC06	Investigating Differential Gene Expression Between COVID-19 Patients with Mild Versus Severe Symptoms	South Korea
Second Prize	IBBC21	Toxicological Investigation of Pesticides, Using Paramecium as a Model Organism	Ireland
Second Prize	IBBC35	Cover with Quince Seeds, Store Food Safely	Turkey
Second Prize	IBBC36	A Novel study of the Bio-Pesticidal Properties of <i>Annona reticulata</i>	India
Third Prize	IABC10	Foot Deodorant Stickers Made from Silver Nanoparticles	Thailand
Third Prize	IBBC02	Dependence of Intestinal Microbiota of White Rats on the Effects of Glyphosate, Saccharin and Sodium Benzoate	Ukraine
Third Prize	IBBC03	K-Cellulose Mask	South Korea
Third Prize	IBBC20	Reuse Nutshell to Prevent the Production of Saltpeter in Building Structures	Mexico
Third Prize	IBBC25	Is a sweeter carnation... also more colourful?	Italy
Third Prize	IBBC27	Panovit - Fodder Protein of Microbial Synthesis	Russia
Third Prize	IBBC28	Adiponectin and BAT - Structure and Morphology of Brown Adipose Tissue in Adiponectin Transgenic Mice	Sweden
Third Prize	IBBC46	The Mystery of Bockstensmannen – A Study in Decomposition of Organic Material	Sweden
Honourable Mention	IABC04	Chemical Dispenser	Ukraine
Honourable Mention	IABC14	The Periodic Table: A Scientific, Inclusive and Technological Development Instrument	Brazil
Honourable Mention	IABC15	„Natural Homemade Topical Pain Relief Ointment “Anti-dolore Cream	North Macedonia
Honourable Mention	IBBC01	Study of Efficiency of Corrosion Inhibitors Properties Created on the Basis of Plant Raw Materials in Different Environments	Ukraine

Award	Team No.	Project Title	Country
Honourable Mention	IBBC13	Characteristics of Lichen Symbiotic Microorganisms and their Industrial Application	South Korea
Honourable Mention	IBBC15	Effect of Phospholipase A2 from Honey Bee Venom on 5-Fluorouracil Drug Sensitivity on Colorectal Cancer Cell Lines	South Korea
Honourable Mention	IBBC17	Catfish Cultivation Using PaSiPung Pellets (Papaya Leaves, Rice, and Fish Meal)	Indonesia
Honourable Mention	IBBC19	Use of the <i>Opuntia ficus-indica</i> as a Coagulant for Wastewater Treatment	Mexico
Honourable Mention	IBBC29	The Antimicrobial Effect of Beehive Products	Sweden
Honourable Mention	IBBC33	Recovering Wounds with Pennyroyal	Turkey
Honourable Mention	IBBC39	Harvesting Ai Aning: Conservation of Sumbawa Honey by Analysis of Honeycomb and Migration of <i>Apis dorsata</i>	Indonesia
Honourable Mention	IBBC40	Innovation of Green Biodiesel by Transesterification Reaction of Black Soldier Fly ( <i>Hermetia illucens</i> ) Larva Fat with CaO Catalyst from <i>Pila Ampullacea</i> Shells	Indonesia
Honourable Mention	IBBC41	Investigation of the Chitokram Umbrella for Mold and UV Protections	Thailand