Biological Testing

Classes of Test

August 2012

Biological Testing

The following is a listing of the classes and subclasses of tests available in the field of Biological Testing.

Free text is also used to describe the specific methods for which a facility is accredited together with the range of organisms which may be tested (except of Plant Health Diagnostic Testing).

Classes of test

8.01 Tests on human pharmaceutical and biological products
- .10 Endotoxin tests
- .11 Toxicity tests
- .12 Pyrogen tests
- .13 Bioassays of immunological products
- .14 Bioassays of hormones
- .15 Bioassays of vitamins
- .17 Bioassays of enzymes
- .18 Assay of blood products
- .19 Physiochemical tests
- .20 Potency of immunological products
- .21 Safety of immunological products
- .22 Quality control testing
- .30 Microscopy
- .40 Microbial counts
- .41 Preservative efficacy
- .42 Microbioassays of vitamins
- .43 Microbioassays of enzymes
- .44 Microbioassays of chemotherapeutic agents
- .45 Microbioassays of antibiotics
- .46 Probiotics
- .99 Other tests

8.02 Tests on veterinary pharmaceutical and biological products
- .11 Bioassays of hormones
- .12 Bioassays of vitamins
- .13 Bioassays of enzymes
- .14 Bioassays of immunological products
- .19 Physiochemical tests
- .20 Potency of immunological products
- .21 Safety of immunological products
- .22 Quality control testing
- .40 Microbial count
- .41 Preservative efficacy
- .42 Microbioassays of vitamins
- .43 Microbioassays of antibiotics
- .99 Other tests

8.03 Pharmacological and biochemical tests on foods, stockfoods and their additives
- .11 Toxicity tests
- .12 Bioassays
- .13 Antibiotics
- .14 Allergenic proteins
- .99 Other tests

8.04 Pharmacological tests on other materials
- .11 Toxicity tests
- .12 Bioassays
- .99 Other tests

8.05 Sterility tests on pharmaceuticals
- .01 Filtrable solutions and soluble preparations (membrane filtration)
- .02 Surgical dressings and devices
- .03 Non-filtrable preparations, including ointments

8.09 Effectiveness tests on biocides
- .01 Fungicides
- .02 Bactericides
- .03 Algacides
- .04 Viricides
- .05 Sporicides
- .06 Nappy sanitiser
- .07 Insecticides

8.10 Microbiological tests on cosmetics, perfumes and essential oils
- .12 Microbial counts on cosmetics
- .13 Preservative efficacy
- .22 Microbial counts on perfumes
- .32 Microbial counts on essential oils

8.11 Microbiological tests on foods
- .01 Cereal products
- .02 Nuts and nut products
- .03 Dairy products
- .04 Meat and meat products
- .05 Poultry and poultry products
- .06 Eggs and egg products
- .07 Fish, crustaceans and molluscs
- .08 Edible fats and oils
- .10 Heat-processed foods in hermetically sealed containers
- .11 Sugar products, honey and confectionery
- .12 Vegetables and vegetable products
- .13 Fruit and fruit products
- .14 Beverages
- .17 Animal feeds
- .20 Mixed foods
- .24 Nutritional supplements
- .25 Additives to foods
- .26 Gelatine and other gums
- .27 Herbs and spices
- .28 Pet foods
- .49 Other food products
- .81 Sample collection
- .82 Sampling plan
- .99 Other tests

8.12 Meat and fish species testing
- .01 Immunological techniques
- .02 Isoelectric focusing
- .03 ELISA
- .04 Electrophoresis

8.13 Public health investigation
- .01 Detection and characterization, including identification and typing of bacteria.
- .02 Detection and characterization, including identification and typing of yeasts and moulds

8.14 Challenge testing
- .01 Bacterial
- .02 Yeasts and Moulds

8.15 Media quality control (Accreditation applicable only to suppliers of media)
- .01 Bacteriology media - general purpose
- .02 Bacteriology media - selective
- .03 Bacteriology media - antibiotic sensitivity
- .04 Bacteriology media - biochemical test media
- .05 Routine isolation/differential mycology media*
- .06 Specialised differential/ identification mycology media
- .07 Mycobacteriology media

.08 Virology media
.81 Sample collection
.82 Sampling plan

**Sabourauds Agar (plus variations), Dermatophyte Test Medium, Lactrimel Agar (plus variations), Malt Extract Agar (plus variations), Mycology Urea Agar, Mycosel Agar, Potato Dextrose Agar, DRBC Agar, DG18 Agar and Chromogenic Yeast Media, Dermasel, OGYE.*

8.17 Testing of surfaces in abattoirs
.01 Meat surfaces
.02 Product contact surfaces
.03 Sampling

8.18 Microbiological tests for monitoring defined environments
.01 Surfaces
.02 Air
.03 Water
.81 Sample collection

8.19 Microbiological tests on other materials
.01 Surgical dressings and related materials
.02 Medical devices
.03 Diagnostic kits
.11 Lubricants
.12 Fuels and oils
.15 Detergents
.20 Pulp and paper
.21 Packaging materials
.31 Clinical specimens
.50 Soils
.99 Other materials

8.20 Resistance to microbial attack
.01 Textiles and fabrics
.02 Electrical components
.03 Paints and surface coatings
.04 Adhesives, glues and other bondings
.05 Paper and paper pulp
.15 Detergents
.99 Other materials

8.21 Effectiveness of pesticides
.01 Insecticides
.02 Fungicides
.03 Herbicides
.04 Repellents

8.22 Resistance to insect attack
.01 Textiles and fabrics
.02 Timber and allied materials
.99 Other materials

8.23 Insect infestation

8.30 Sensory evaluation tests on foods

8.31 Industrial cultures
.11 Maintenance
.12 Strain affirmation
.13 Activity tests
.14 Contaminants
.21 Sensitivity to inhibitor
.22 Bacteriophage resistance
.23 Disturbing bacteriophage

8.32 Maintenance of culture collections (Accreditation applicable only to suppliers of reference materials)
- .01 Preservation
- .02 Propagation
- .03 Identification
- .04 Quantification

8.40 Plant health diagnostics - Bacteriology
- .01 General diagnostic bacteriology – incorporating identification by symptomology, light microscopy, culturing methods of detection and identification of organisms
- .02 Immunological methods of identification
- .03 Identification by electron microscopy
- .04 Identification by molecular techniques
- .05 Biochemical testing
- .06 Bioassays (incorporating host specificity testing)
- .07 Quantitative procedures
- .99 Other

8.41 Plant health diagnostics - Virology (incorporating virus-like organisms and viroids)
- .01 Identification by symptomatology
- .02 Identification by immunological methods
- .03 Identification by electron microscopy
- .04 Identification by molecular techniques
- .05 Quantitative procedures
- .06 Bioassays (incorporating indicator plants)
- .99 Other

8.42 Plant health diagnostics - Mycology (including oomycetes)
- .01 General diagnostic mycology – incorporating identification by symptomatology, light microscopy, cultural methods of detection and identification of organisms
- .02 Immunological methods of identification
- .03 Identification by electron microscopy
- .04 Identification by molecular techniques
- .05 Bioassays (incorporating host specificity and fungicide susceptibility testing)
- .06 Quantitative procedures
- .99 Other

8.43 Plant health diagnostics - Other micro-organisms (incorporating phytoplasmas)
- .01 General diagnostic microbiology
- .02 Immunological methods of identification
- .03 Identification by electron microscopy
- .04 Identification by molecular techniques
- .05 Bioassays (incorporating host specificity and antimicrobial susceptibility testing)
- .06 Quantitative procedures
- .99 Other

8.44 Plant health diagnostics - Nematodes
- .01 General diagnostic nematology – incorporating symptomatology, detection and identification using morphological methods
- .02 Extraction methods for isolating nematodes from samples
- .03 Immunological methods of identification
- .04 Identification by molecular techniques
- .05 Bioassays (incorporating nematicide susceptibility testing)
- .06 Quantitative procedures (for example soil cyst counts)
- .99 Other

8.45 Plant health diagnostics- - Molluscs
- .01 General diagnostic malacology – incorporating identification using morphological methods
- .02 Identification by molecular techniques
- .03 Bioassays (incorporating molluscicide susceptibility testing)
- .04 Quantitative procedures
- .99 Other

8.46 Plant health diagnostics - Insecta
- .01 General diagnostic entomology – incorporating detection and identification using symptomatology and morphological methods including slide preparation and microscopy
- .02 Microscopy
- .03 Biochemical methods of identification
- .04 Identification by molecular techniques
- .05 Bioassays (incorporating host specificity testing and pesticide susceptibility testing)
- .06 Quantitative procedures
- .99 Other

8.47 Plant health diagnostics - Acarina
- .01 General diagnostic acarology – incorporating detection and identification using symptomatology and morphological methods including slide preparation and microscopy
- .02 Immunological methods of identification
- .03 Identification by molecular techniques
- .04 Bioassays (incorporating host specificity testing and pesticide susceptibility testing)
- .05 Quantitative procedures
- .99 Other

8.48 Plant health diagnostics – Other invertebrates
- .01 General diagnostic zoology – incorporating detection and identification using symptomatology and morphological methods including slide preparation and microscopy
- .02 Immunological methods of identification
- .03 Identification by molecular techniques
- .04 Bioassays (incorporating pesticide susceptibility testing)
- .05 Quantitative procedures
- .99 Other

8.60 Terrestrial biology
- .01 Identification and enumeration of biota
- .21 Ecosystem studies
- .99 Other tests

8.61 Plant biology
- .01 Identification using morphological or other botanical techniques
- .02 Identification of molecular techniques
- .03 Bioassays (incorporating herbicide susceptibility testing)
- .04 Quantitative procedures
- .05 Plant hormones
- .99 Other tests

8.62 Commodity seed testing
- .01 Sprouting test
- .02 Mung bean export oversoak test
- .03 Chickpea/chickpea splits export purity test
- .04 Grain/legume purity test
- .05 Bird seed export quality grain test
- .06 Oil seeds purity, moisture and oil content
- .07 Bird seed

8.63 Seed testing
- .11 Sampling
- .12 Moisture
- .13 Purity
- .14 Germination
- .15 Tetrazolium
- .16 Fluorescence
- .17. Weed seed search
- .99 Other tests

8.65 Aquatic Biology (of specified water source*)
- .11 Identification and enumeration of planktonic microalgae and cyanobacteria to specified level**
- .13 General biomass and dry weight of planktonic algae
- .15 Phyto-pigment determination
- .18 Sampling of planktonic microalgae and cyanobacteria
- .21 Identification and enumeration of non planktonic microalgae and cyanobacteria to specified level**
- .23 General biomass and dry weight of non planktonic algae
- .28 Sampling of non planktonic algae and cyanobacteria
- .31 Identification of enteric protozoa to specified level**
- .32 Enumeration of enteric protozoa to specified level**
- .33 General biomass of enteric protozoa
- .38 Sampling of enteric protozoa
- .41 Identification of freeliving protozoa to specified level**
- .42 Enumeration of freeliving protozoa to specified level**
- .43 General biomass of freeliving protozoa
- .48 Sampling of freeliving protozoa
- .51 Identification and enumeration of microinvertebrates to specified level**
- .53 General biomass and dry weight of microinvertebrates
- .58 Sampling of microinvertebrates
- .61 Identification and enumeration of macroinvertebrates to specified level**
- .63 General biomass and dry weight of macroinvertebrates
- .68 Sampling of macroinvertebrates
- .71 Identification and enumeration of macrophytic algae to specified level**
- .73 General biomass and dry weight of macrophytic algae
- .78 Sampling of macrophytic algae
- .81 Identification and enumeration of macrophytic plants to specified level**
- .83 General biomass and dry weight of macrophytic plants
- .88 Sampling of macrophytic plants

** Potable water, industrial water, sewage, trade wastes, swimming pools and spas, environmental waters (freshwater, estuarine, marine)*
*** Division, phylum, order, family, genus, species, genotype, user-defined group*

8.66 Ecotoxicology
- .01 Bioassay, including toxicity tests

8.70 Waters, including effluents
- .11 Bacteriological condition of potable waters
- .12 Bacteriological condition of industrial waters (treated, recirculating)
- .13 Bacteriological condition of sewage
- .14 Bacteriological condition of trade wastes
- .15 Bacteriological condition of swimming pools and spas
- .16 Bacteriological condition of environmental waters
- .17 Bacteriological condition of recycled waters
- .18 Bacteriological condition of purified/processed waters
- .22 Biochemical oxygen demand of industrial waters
- .23 Biochemical oxygen demand of sewage
- .24 Biochemical oxygen demand of trade wastes
- .41 Mycological condition of potable waters
- .42 Mycological condition of industrial waters
- .43 Mycological condition of sewage
- .44 Mycological condition of trade wastes
- .51 Virological condition of potable waters
- .52 Virological condition of industrial waters
- .53 Virological condition of sewage
- .54 Virological condition of trade wastes
- .55 Virological condition of swimming pools and spas
- .56 Virological condition of environmental waters
- .81 Sample collection
- .82 Sampling plan
- .99 Other tests

8.80 Tests on substances for potential genetic activity
- .11 Bacterial mutagenicity tests
- .12 Sister chromatid exchange tests
- .13 Transformation assays in cell structure
- .99 Other tests

8.81 Nucleic acid analysis
- .01 Sequencing
- .02 Genotyping
- .03 Gene expression

8.82 Analysis of GMO
- .01 Detection by DNA
- .02 Quantification

8.90 Cell culture
- .01 Cytotoxicity tests