COGEM RESEARCH REPORT

CLASSIFICATION OF BACTERIAL PATHOGENS

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Voorwoord

De COGEM heeft een onderzoek laten uitvoeren naar de classificatie van pathogene en apathogene bacteriën. Dit onderzoek is gestart naar aanleiding van een adviesvraag vanuit het voormalige ministerie van VROM aangaande de herziening van Bijlage 1 bij de Regeling GGO. Deze Bijlage 1 bestaat uit een lijst van micro-organismen die niet pathogeen zijn voor mens, dier of plant en waarmee onder bepaalde voorwaarden op het laagste inperkingsniveau ML-I gewerkt mag worden. In het onderzoek is de classificatie van de niet-pathogene bacteriën tegen het licht gehouden.

Daarnaast is de classificatie van pathogene bacteriën onderzocht. Dit hangt samen met een andere adviesvraag aan de COGEM over de herziening van de 'lijst van pathogene micro-organismen en agentia'. Deze lijst was oorspronkelijk als Appendix A aan de Regeling genetisch gemodificeerde organismen (ggo) toegevoegd, maar maakt sinds 2004 geen deel meer uit van de Regeling ggo. Desondanks wordt de lijst nog veel gebruikt bij de vergunningverlening van werkzaamheden met ggo's. Het ministerie van Infrastructuur en Milieu is van plan deze lijst weer op te nemen in de herziene versie van het Besluit ggo en de Regeling ggo.

Bovenbeschreven onderzoek is uitgevoerd door prof. dr. dr. A. van Belkum van het Erasmus MC te Rotterdam en is begeleid door een commissie met leden van de COGEM, het Bureau GGO en enkele externe experts. In het onderzoek is de classificatie van humaan- en dierpathogene bacteriën van tien verschillende lijsten van verschillende nationale en internationale organisaties op een rij gezet en met elkaar vergeleken. Deze meta-analyse heeft geresulteerd in een lijst met 2575 bacteriegenera en -soorten. Voor het merendeel van deze bacteriën is onder de geraadpleegde lijsten consensus over de classificatie. Over de classificatie van 260 bacteriën zijn de verschillende lijsten echter niet eenduidig. Voor deze zogenaamde controversiële bacteriën heeft Van Belkum de wetenschappelijke literatuur nagezocht op gegevens over mogelijke pathogeniteit voor mens en (landbouw)huisdieren. Op basis van de beschikbare literatuurgegevens en de classificatie van de geraadpleegde lijsten zijn ook deze controversiële bacteriën ingedeeld in pathogeniteitsklassen. De argumentatie achter de indeling van ieder van deze controversiële bacteriën is in een bijlage bij dit rapport opgenomen. Hierbij moet opgemerkt worden dat de focus van classificatie heeft gelegen op de pathogeniteit van deze bacteriën in mensen en (landbouw)huisdieren. De mogelijke pathogeniteit in planten en dieren, zoals insecten, vissen etc. is derhalve niet bij de uiteindelijke classificatie betrokken.

Het onderzoek van Van Belkum heeft geresulteerd in een up-to-date lijst met de classificatie van 2575 bacteriën en biedt een uitstekende basis om tot een algemene herziening te komen van de classificatie van de (a)pathogene bacteriën voor het gebruik in de ggo-vergunningverlening. Naar alle verwachting zal de COGEM binnenkort op basis van dit rapport een herziene lijst uitbrengen van zowel de apathogene bacteriën als ook de pathogene bacteriën.

Met vriendelijke groeten,

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ABSTRACT

Bacterial species can be classified in a variety of pathogenicity categories. From “generally recognised as safe” to highly invasive species are usually catalogued from biohazard class 1 to 4. However, the current international listings are not always in agreement. We here present a meta-analysis of nine of such rankings. This involves the pathogenicity assessment of some 2500 bacterial species, the majority was based on consensus among the various lists. For 260 species inter-list ambiguities were noted which were resolved by literature screening and interviews with well-known specialists in the field. We here present a consensus list of 2575 species and genera with affiliated biosafety classification. This list should become a major resource for future risk assessments for experimental procedures involving one or more of the species or genera listed.

INTRODUCTION

Humans, animals and the environment are heavily colonized with microbes. Some of these microbes can go through a transition from the colonization state into a state of genuine infection. Microbes capable of causing such infections or microbes that are obligatory infectious agents in humans or animals are called pathogens (in the ancient Greek language: *pathos*: disease; *genesis*: bringing into being) (Pordeus *et al*., 2008; Van Belkum, 2006). Pathogens may display different levels of invasive potential, from mild to life-threatening. These features must be considered if the risk of working with such pathogens is to be assessed, since these activities hold risks for the laboratory personnel involved in the experiments (Singh, 2009; Sadoh *et al*., 2006). The risk depends primarily on the disease invoking or sick-drawing potential of the organisms and the more pathogenic a species is the higher the infection risk will be. In addition, the propensity to spread is another important determinant of pathogenicity (Martinez and Baquero, 2002). Microbiological risk assessment is important, especially in the light of safety measures to which the work with microbes should adhere to (Davenport and Meyers, 2009; Hugas *et al*., 2007).

In order to implement adequate safety measures microbial pathogenicity should be defined in an unambiguous manner. This is, however, not always straightforward to do (Paine and Flower, 2002; Smith *et al*., 2000). In the simplest of terms: pathogenicity equals the capability of causing disease within another organism, which for the present publication will be restricted to bacterial species infecting humans and animals. Literally, microbial pathogenicity is the result of many different attributes: bacterial attachment, local proliferation, tissue damage, invasion and dissemination are all parameters of infectious potential (Sparling, 1983; Wassenaar and Gaastra, 2001). All stages are essential and if one is interrupted full-blown pathogenicity can never be achieved. Pathogenicity is usually defined on the basis of the disease phenotype (e.g. fever, diarhoeae, skin lesions, abscesses etc). The degree of pathogenicity may be regarded as synonymous with the microbial degree of virulence which is defined by the combined activity of all genes whose products are involved in interactions with the host that lead to pathological damage (Allen and Torres, 2008; Lynch and Wiener-Kronish,

2008). Thus, the degree of virulence is defined on the basis of bacterial rather than host characteristics. The bacterial virulence genes encode fimbriae, flagella, toxins, immuno-modulating entities, lytic enzymes and many other factors involved in host-microbe interplay (Casadevall and Pirofsky, 2003). For each and any of these virulence factors lists can be made of the most relevant ones. When toxins are considered, for instance, a number of highly potent ones can be noted (Table 1). However, for assessing the virulence of a bacterial species overall assessment of all of its virulence factors should be made and focussing on toxins only may lead to mis-classifications. Where bacterial pathogenicity is enabled by a variety of virulence genes (Wassenaar and Gaastra, 2001), pathogenicity can also be defined by host features, with (non-) specific immunity as one of the most important ones. Bacterial species with highly pathogenic potential cause significant mortality and morbidity, less pathogenic ones primarily cause morbidity. Opportunistic pathogens may or may not cause disease, depending on the natural equilibrium between pathogen and hosts (Packey and Sartor, 2009). Pathogens have been described for a large variety of host species and pathogen classification is supposed to be informative on the infectious risks suffered by those working with such disease-invoking agents.

Pathogen classification is important from the perspective of infection prevention, but also from the standpoints of legislation. Within the current theoretical and practical frameworks, species of microbial pathogens can be categorized in four major pathogenicity classes which depend on generic risk assessments and analyses. These are:

Class 1: Microbial species covered by one of the following criteria:

1. The species or strain does not belong to a recognized group of disease-invoking agents in humans or animals.
2. The species has an extended history of safe usage under conditions without any physical restrictions, although there may be differences in virulence between strains within the species that should be taken into account.
3. The species belongs to one of the following classes but a specific strain within the species may lack the genes responsible for pathogenicity in

humans and animals. The degree of attenuation of the particular strain may put it in an exceptional position. This implies that within species of categories 2, 3 and 4 specific strains may be down-regulated to class 1. This requires extensive laboratory data support.

4. Non-pathogenicity of the species has been convincingly demonstrated by *in vitro* and *in vivo* testing.

Class 2: Species that can cause diseases in humans or animals, which are unlikely to spread in the human population and for which an adequate prophylaxis or therapy exists.

Class 3: Species that cause serious human disease, which is likely to disseminate in the human population, but for which an adequate prophylaxis or therapy exists.

Class 4: Species that cause very serious human disease, which is likely to disseminate in the human population and for which no adequate prophylaxis or therapy exists

These classes correspond to the definitions of pathogenicity as given above with the least pathogenic bacterial species residing in class 1. The mild pathogens are in class 2 and the more obligate pathogens, causing significant morbidity and also mortality are in the classes 3 and 4 (Lelieveld *et al*., 1996). Of note is that currently not a single bacterial species is classified as a class 4 pathogen. It has to be realised that the bacterial species listed as class 3 are the most pathogenic ones currently recognised. These species, when investigated in laboratories, can all be potentially subject to dual use application: all significant pathogens can be considered potential agents of biological warfare (Miller and Selgelid, 2007; Kuhlau *et al*., 2008). When permissions to work with such organisms are awarded, it should be noted that strict regulations are warranted. It is also important to note that diagnostic laboratories play an important role since specialists in these labs are reponsible for the timely, specific and sensitive detection of pathogens. Being able to detect especially the pathogens of the higher classes, however, is often cumbersome (Christensen *et al*., 2006). Firstly, class 3 bacterial pathogens are not very often expected or suspected and, hence, genuine expertise is often not routinely available. Second, when present in mixed

bacterial flora, the untrained eye can still easily miss potential pathogens. Beyond all factors listed in the above, several circumstantial conditions can be relevant to the observed pathogenicity of bacterial species. These include but are not restricted to:

1. **Zoonotic availability.** Bacterial pathogens that are frequent among for instance farm animals stand a relevant chance of being introduced into the food chain. In that way infections in humans can become more frequent than anticipated (Schlundt *et al*., 2004).
2. **The presence of vectors.** Bacterial transmission via (in)animate vectors enhances human exposure to such agents. Again food is an important issue here, as is close human contact (Randolph, 2008; Kalluri *et al*., 2007).
3. **Modes of transmission (aerosol-, contact-, environment-, behavioral- (i.e. sexual) dissemination mechanisms).** The more efficiently a bacterial pathogen can disseminate (which depends upon a relatively large number of determinants), the more likely it is to spread among humans. Several nasopharyngeal pathogens (*Streptococcus pneumoniae, Haemophilus influenzae, Moraxella catarrhalis*) can spread via an airborne route and when crowding occurs (for instance in child care) will do so very efficiently (Mink and Yeh, 2009).
4. **Persistence in the environment, outside of the host.** Survival under unfavourable conditions is an important fitness characteristic. The capacity to form spores for instance will help certain species to survive for extended periods in arid and warm environments (Setlow, 2007). Vegetative cells will re-appear once the conditions improve.
5. **Economic factors.** The presence of certain pathogens that are not highly invasive, but still a significant cause of disease in production animals, may lead to economic blockades with severe financial consequences. Such pathogens, though classified in the lower risk categories, may still be worth diagnosing and preventing from further spread.

Classification of a pathogenic bacterial species should always be performed in the context of at least all of the parameters mentioned above. The classification should be based upon a number of criteria which on the whole fit optimally with pathogen' classes 1 to 4. An important and well accepted concept in this respect is that of bacterial species that are "generally recognised as safe" or GRAS (e.g. Salminen et al., 1998). Besides the completely innocent bacterial species, upgraded categories exist. These for instance include the agents causing opportunistic infections; these are caused by pathogens that are not normally infectious to healthy hosts. If host immunity wanes, these pathogens may seize the opportunity and cause infections in weakened hosts. Essentially, such species will be classified as class 2 pathogens in general.

Working with pathogens poses strict technological demands on the laboratory facilities. Biosafety levels (BSL) need to be commensurate with the pathogen classes to be used (Perfetto *et al*., 2004). BSL-1 laboratories are devoid of primary barriers, whereas BSL-2 laboratories require class I or II biosafety cabinets (BSC) for all manipulations that may cause aerosols or splashes of infectious material. In BSL-2 laboratories, specified laboratory coats, gloves and face protection need to be worn as needed. In BSL-3 laboratories all manipulations need to be performed in class I or II BSCs and in addition to the precautions of the BSL-2 setting respiratory protection may be required. Finally, in the BSL-4 laboratory all manipulations need to be performed in class III BSCs in combination with full-body, air-supplied, positive-pressure suits. In The Netherlands the biosafety levels ML-I, ML-II, ML-III and ML-IV coincide with permission to work with class 1, 2, 3, and 4 level pathogens, respectively. The Dutch Society for Microbiology has published a specific book on this topic (Veilig Werken met Microorganismen, Parasieten en Cellen in Laboratoria en Andere Werkruimten, ISBN 978-90-8559-549-6).

Several agencies and instances have formulated more or less comprehensive biosafety classification lists of bacterial pathogens. In these lists the organisms are classified according to the scheme given above, albeit that from list to list classifications can differ subtly. This may depend on local regulations or different author's insights in the pathogenicity of certain

bacterial species or genera. It is also important to realise that microbial biohazard statuses may evolve as for instance in the case of (re-)emerging infectious diseases (Butinar et al., 2007; Rimek et al., 2004; Titelnot and Losert, 2005; Sugita et al., 2003; Kato et al., 2007). Some of the agencies that developed the lists with risk categories are identified below:

1. **Dutch Society for Microbiology:** In the manual for safe manipulation of micro-organisms (Veilig Werken met Mico-Organismen, Parasieten en Cellen in Laboratoria en Andere Werkruimten: Theorie en Praktijk, ISBN 978-90-8559-549-6) a full chapter is dedicated to pathogen classification. This classification is in agreement with the one used by the Dutch Committee on Genetic Modification COGEM and has been partially endorsed by Dutch legislation (ARBO).
2. **Deutsche Sammlung von Mikroorganismen und Zellculturen:** This list is accessible via the Internet and a very significant fraction of all bacterial species available have been classified (www.dsmz.de). There is gross agreement between the Dutch and German lists, but several discrepancies have already been noted.
3. **American Type Culture Collection:** The ATCC is one of the largest organizations collecting, storing and also selling microbial type isolates. Their catalogue describes the risk category for all of the species that they have commercially available (www.atcc.org and www.lgcstandards-atcc.org). For the present survey the Microbiologics Catalogue with all commercially available agents available from ATCC will be used.
4. **Liste BG Chemie Merkblatt B 0006 (july 2005) Sichere Biotechnologie: Einstufung Biologischer Arbeitsstoffe: Prokaryonten:** A detailed German reference list of a large number of microorganisms and their risk classifications (http://www.bvl.bund.de/nn_490866/DE/03__Bedarfsgegenstaende/00__doks__download/bekanntmach__Infektionsschutzgesetz__Stand__20__Juni__2008,templateId=raw,property=publicationFile.pdf/bekanntmach_Infektionsschutzgesetz_Stand_20_Juni_2008.pdf).

5. **Directive 2000/54/EC of the European Parliament and of the Council of 18 september 2000 on the protection of workers from risks related to exposure to biological agents at work. Official Journal of the European Communities L262/31-33:** A European Directive, summarising the high-risk class pathogens from category 2 and 3 (www.opbw.org/nat_imp/leg_reg/uk/ec_com_2000_54.pdf).
6. **Belgian Biosafety Server. List of bacteria and similar organisms presenting at the wild state a biological risk for immunocompetent humans and/or animals and their biological risk. Devised in 1998, downloaded from the website 24th of April, 2009:** A risk classification provided by a Belgian specialist' group. Interestingly, this is the single list that identifies several of the class 2 pathogens as opportunistic pathogens rather than real pathogens (www.biosafety.be).
7. **J.P. EUZEBY: List of prokaryotic names with standing in nomenclature, September 9, 2005:** A list generated by a well known specialist in the field (www.bacterio.cict.fr/).
8. **Arbo informatie AI-9 Biologische Agentia, Sdu Uitgevers, Ministerie van Sociale Zaken en Werkgelegenheid:** Dutch governmental reference list of the higher class pathogens only (www.sdu.nl/arbo).
9. **Advisory Committee on Dangerous Pathogens:** The approved list of biological agents, developed by the Health and Safety Executive of the UK (http://www.hse.gov.uk/pubns/misc208.pdf).

In addition, several comparative analyses of the lists identified above or other lists to be identified in later sections of this manuscript have been published in the past (e.g. Approved List of Biological Agents, 2004; Health Service and Safety Executive, 2003; Frommer, 1989; Lelieveld, 1996; Kuenzi, 1985; Kuenzi, 1987; Lister, 1992; Burge, 1992; De Hoog, 1996; Meinhof *et al*., 1996; Padhye *et al*., 1998; Vollekova *et al*., 1998).

The present review will focus on microbial disease agents that manifest themselves in humans and (their companion) animals. It should be remembered that bacteria can also cause infections in organisms as diverse

as fish, crustaceans, bees and molluscs (e.g. Johnson *et al*., 2009). This will not be included in the current analysis and neither will be a pathogenicity assessment of plant pathogens. This is because such pathogens do not generally represents risks to humans and will usually be classified as class 1 human and animal pathogens. However, these species should of course be considered in risk assessments from environment and agrocultural standpoints. There is a forum for the discussion of bacterial plant pathogenicity (European Plant Pathogen Organisation (EPPO), 2007) and handling and shipping of plant pathogens is regulated by the Organisation for Economic and Cultural Development (OECD) (Anonymous, 2009). So guidelines are avaialbale or being devoped, which will not be detailed here.

Fortunately and very important to realise, most known bacterial species are non-pathogenic. We will here present a comparative analysis of a number of the classification schemes that are currently available. The intention is to present a new classification scheme, generated as a consesnsus scheme based on the cumulative analysis of lists that are already available.

WORKING PROCEDURE

An inventory of nine bacterial biohazard classification list was made. All genera and species that were unanimously categorised in a single category were assessed and a conform classification was proposed. For all of the genera and species for which discordances existed between the lists a consensus was defined on the basis of literature research and consultation with experts in the field. This generated the main product of this analysis: a list comprising 2575 genera and species classified according to today's Gold Standard.

RESULTS

A number of nine different classification lists was consulted (March-April 2009). Supplementary Table 1 was constructed on the basis of this extensive comparative search. The German DSMZ catalogue, which describes the broadest series of bacterial species, was used to set the standard: all species mentioned in this catalogue were included in this list and data from the other catalogues was matched with but also added to the

German species coverage. This makes that Supplementary Table 1 shows a extensive comparison of existing rankings and allows for the assessment of generally accepted categories of bacterial species of low virulence (class 1 organisms). The identification of this category of organisms was simple: in case a species was never nominated class 2 in any of the listings it was considered to be reliably classified as risk category 1. So this resulted in a meta-analysis-based consensus listing where a clear distinction could be made between low and high risk pathogens. Supplementary Table 2 shows all of the organisms which were classified in risk category 2 or higher in any one (or more) of the individual lists. This table also distinguishes between human and animal pathogens (column J) and was subsequently used for further delineation and corroboration of the higher risk categories. In this table, all microorganisms that were classified unanimously as class 3 were highlighted in red and bold lettertype. All uniformous class 2 pathogens (over 80% of all classifications) were highlighted in green and bold lettertype. When this was implemented a number of 260 controversial genera and species resulted. This concerns over 10% of all the entries which surely is a significant number. These controversially assigned species and genera were re-assessed on the basis of a literature search and publications consulted and conclusions arrived at are listed in Supplementary Table 3. These data were accumulated and deposited in a consensus Table 2. This Table is added to this manuscript and should serve a a future source of reference for establishing biohazard levels of microbes.

CONCLUDING REMARKS

We have established a consensus list containing 2575 entries: these genera and species have been attributed individual risk scores. This list should be considered the most up to date document currently available and by posting this list on at least two websites and by providing an interactive forum for additions to and suggestions for improvements of the list, we hope to keep this list actual by six-monthly updates. This should provide and stay a useful resource for all those involved in bacterial biohazard risk assessments.

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LEGEND TO TABLES

Table 1. Major toxinogenic bacterial species, their toxins with human activity and the toxin effects**.**

Table 2. Survey of 2575 bacterial genera, relevant species and their risk categories as defined by different institutions as was initially based on the DSMZ catalogue dd. 24 march 2009. The DSMZ catalogue is integrally compared to lists displayed in columns A through I and provided by:

A. Dutch Society for Microbiology NVvM, Committee on Biological Safety
B. Microbiologics Catalogue, primarily ATCC stocks (37^{TH} Edition, revision januari 2008)
C. Liste BG Chemie Merkblatt B 0006 (july 2005) Sichere Biotechnologie: Einstufung Biologischer Arbeitsstoffe: Prokaryonten.
D. Directive 2000/54/EC of the European Parliament and of the Council of 18 september 2000 on the protection of workers from risks related to exposure to biological agents at work. Official Journal of the European Communities L262/31-33.
E. Belgian Biosafety Server. List of bacteria and similar organisms presenting at the wild state a biological risk for immunocompetent humans and/or animals and their biological risk. Devised in 1998, downloaded from the website 24^{th} of April, 2009. (OP: OPPORTUNISTIC PATHOGEN)
F. J.P. EUZEBY:List of prokaryotic names with standing in nomenclature, September 9, 2005.
G. Arbo informatie AI-9 Biologische Agentia, Sdu Uitgevers, Ministerie van Sociale Zaken en Werkgelegenheid.
H. Richtlinien Einstufung von Microorganismen: Bakterien. Bundesamt fur Umwelt, Wald und Landschaft BUWAL. Bern, 2003. Editor Dr Joachim Frey, Universitaet Bern, Institut fur Veterinaerbakteriologie. Bezug PDF.
I. The advisory committee on Dangerous pathogens, Approved List of Biological Agents: list developed by the Health and Safety Executive UK; Crown copy right 2004, Copyright Unit, Her Majesty's Stationery Office, St. Clemens house, 2-16 Colegate Norwich NR3 1BQ, United Kingdom.

The listings have been integrally copied and the different risk categories have been color code: in red class 1, in blue class 3, and in yellow the class 3 biohazard codes. Note that class 1 confirms that the bacterial species involved can be worked with without additional measures in a ML-I laboratory setting. The column displaying the Overall Score was assembled as clarified in the text and detailed in Supplementary Tables 1 to 3.

Table 1

Bacterial Species	Toxin	Effect	Risk category
Bacillus anthracis	protective antigen	required for other toxins	2
	edema factor	edema	
	lethal factor	pulmonary edema	
Bordetella pertussis	adenylate cyclase	blocking white cells	2
	pertussis toxin	many hormonal effects	
	tracheal toxin	interferes with ciliated cells	
Campylobacter jejuni	enterotoxin	diarrhoeae	2
Clostridium botulinum	botulinum toxin	neurotoxin	2
Clostridium difficile	enterotoxin	hemorrhagic diarrhoeae	2
	cytotoxin	removes cellular filaments	
Clostridium tetani	tetanus toxin	spastic paralysis	2
Corynebacterium diphteriae	diphtheria toxin	kills cells	2
Escherichia coli	enterotoxins	diarrhoeae	1/2
	cytotoxin	hemorrhagic colitis	
Legionella pneumophila	cytotoxin	lyses cells	2
Listeria monocytogenes	listeriolysin	membrane damage	2
Pseudomonas aeruginosa	exotoxin A	kills cells	2
Shigella dysenteriae	shigella toxin	kills cells	3
Staphylococcus aureus	alpha toxin	hemolysis, paralysis	2
	beta toxin	cytolytic	
	delta lysine	cytolytic	
	enterotoxins	food poisoning	
	toxic shock toxin	fever, neutropenia, rash	
	exfoliating toxin	sloughing of skin	
Streptococcus pneumoniae	pneumolysin	cytolysin	2
Streptococcus pyogenes	streptolysin	cytolysin	2
	erythrogenic toxin	fever, neutropenia	
Vibrio cholerae	cholera toxin	diarrhoeae	2
Yersinia enterocolitica	enterotoxin	diarrhoeae	2

This table was adapted from the 4th Edition of “Biological Safety: Principles and Practices” edited by Fleming and Hunt (pp. 95-96; 2006).

Table 2

DSMZ list	DSMZ Risk category	A	B	C	D	E	F	G	H	I	Overall Score
ABIOTROPHIA ADIACENS	2	-	-	-	-	-	-	-	2	-	2
ABIOTROPHIA BALAENOPTERAE	2	-	-	-	-	-	-	-	2	-	2
ABIOTROPHIA DEFECTIVA	2	2	-	2	-	-	-	-	2	-	2
ABIOTROPHIA ELEGANS	2	-	-	-	-	-	-	-	2	-	2
ACARICOMES PHYTOSEIULI	1	-	-	-	-	-	-	-	-	-	1
ACETITOMACULUM RUMINIS	1	-	-	1	-	-	-	-	1	-	1
ACETIVIBRIO ETHANOLGIGNENS	2	2	-	2	-	-	-	-	2	-	2
ACETOANAEROBIUM	-	-	-	1	-	-	-	-	1	-	1
ACETOBACTER	1	-	1	1	-	-	-	-	1	-	1
ACETOBACTERIUM	1	-	-	1	-	-	-	-	1	-	1
ACETOFILAMENTUM	-	-	-	1	-	-	-	-	1	-	1
ACETOGENIUM KIVUI	1	-	-	1	-	-	-	-	-	-	1
ACETOHALOBIUM	1	-	-	1	-	-	-	-	1	-	1
ACETOMICROBIUM	1	-	-	1	-	-	-	-	1	-	1
ACETOMONAS	1	-	-	-	-	-	-	-	-	-	1
ACETONEMA LONGUM	1	-	-	1	-	-	-	-	1	-	1
ACETOTHERMUS	-	-	-	1	-	-	-	-	1	-	1
ACHOLEPLASMA AXANTHUM	-	2	-	2	-	2	-	-	2	-	2
ACHOLEPLASMA GRANULARUM	-	2	-	1	-	2	-	-	2	-	2
ACHOLEPLASMA HIPPIKON	-	2	-	2	-	2	-	-	2	-	2
ACHOLEPLASMA LAIDLAWII	2	2	-	2	-	2	-	-	2	-	2
ACHOLEPLASMA MODICUM	-	2	-	2	-	2	-	-	2	-	2
ACHOLEPLASMA OCULI	-	2	-	2	-	2	-	-	2	-	2

ACHROMATIUM	-	-	-	1	-	-	-	-	1	-	1
ACHROMOBACTER XYLOSOXIDANS	2	-	2	2	-	-	-	-	-	-	2
ACHROMOBACTER PIECHADII	-	-	-	2	-	-	-	-	-	-	2
ACIDAMINOBACTER HYDROGENOFORMANS	1	-	-	1	-	-	-	-	1	-	1
ACIDAMINOCOCCUS FERMENTANS	2	2	-	2	-	-	-	-	2	-	2
ACIDAMINOCOCCUS INTESTINI	2	-	-	-	-	-	-	-	-	-	2
ACIDICALDUS	1	-	-	1	-	-	-	-	-	-	1
ACIDIMICROBIUM FERROOXIDANS	1	-	-	1	-	-	-	-	1	-	1
ACIDIPHILIUM	1	-	-	1	-	-	-	-	1	-	1
ACIDISPHAERA	1	-	-	1	-	-	-	-	-	-	1
ACIDITHIOBACILLUS	1	-	-	1	-	-	-	-	-	-	1
ACIDOBACTERIUM	1	-	-	1	-	-	-	-	1	-	1
ACIDOCALDUS	1	-	-	-	-	-	-	-	-	-	1
ACIDOCELLA	1	-	-	1	-	-	-	-	1	-	1
ACIDOMONAS	1	-	-	1	-	-	-	-	1	-	1
ACIDOVORAX	1	-	-	1	-	-	-	-	1	-	1
ACINETOBACTER BAUMANNII	2	2	2	2	-	OP	-	-	2	-	2
ACINETOBACTER CALCOACETICUS	-	-	-	-	-	-	-	-	2	-	2
ACINETOBACTER HAEMOLYTICUS	2	2	2	2	-	OP	-	-	2	-	2
ACINETOBACTER JOHNSONII	2	2	-	2	-	OP	-	-	2	-	2
ACINETOBACTER JUNII	2	2	-	2	-	OP	-	-	2	-	2
ACINETOBACTER LWOFFII	2	2	2	2	-	OP	-	-	2	-	2
ACINETOBACTER PARVUS	-	-	-	2	-	OP	-	-	-	-	2
ACINETOBACTER URSINGII	-	-	-	2	-	OP	-	-	1	-	2
ACROCARPOSPORA	1	-	-	1	-	-	-	-	-	-	1
ACTINACIDIPHILUS	1	-	-	-	-	-	-	-	-	-	1
ACTINOACIDIPHILUS	1	-	-	-	-	-	-	-	-	-	1
ACTINOALLOTEICHUS	1	-	-	1	-	-	-	-	-	-	1
ACTINOBACILLUS ACTINOMYCETEMCOMITANS	2	2	-	2	2	2	2	2	2	2	2

ACTINOBACILLUS CAPSULATUS	**2**	2	-	2	-	2	-	-	2	-	**2**
ACTINOBACILLUS EQUUI	**2**	2	-	2	-	2	-	-	2	-	**2**
ACTINOBACILLUS HOMINIS	**2**	2	-	2	-	2	-	-	2	-	**2**
ACTINOBACILLUS LIGNIERESII	**2**	2	-	2	-	2	-	-	2	-	**2**
ACTINOBACILLUS MURIS	**2**	2	-	1	-	-	-	-	2	-	**1**
ACTINOBACILLUS PLEUROPNEUMONIAE	**2**	2	2	2	-	2	-	-	2	-	**2**
ACTINOBACILLUS ROSSII	**2**	2	-	2	-	2	-	-	2	-	**2**
ACTINOBACILLUS SEMINIS	**2**	2	-	2	-	2	-	-	2	-	**2**
ACTINOBACILLUS SUIS	**2**	2	-	2	-	2	-	-	2	-	**2**
ACTINOBACILLUS UREAE	**2**	2	-	2	-	OP	-	-	2	-	**2**
ACTINOBACTERIA	**1**	-	-	-	-	-	-	-	-	-	**1**
ACTINOBACTERIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
ACTINOBACULUM MASSILIENSE	**2**	-	-	2	-	-	-	-	-	-	**2**
ACTINOBACULUM SCHAALII	**2**	-	-	2	-	-	-	-	2	-	**2**
ACTINOBACULUM SUIS	**2**	-	-	2	-	-	-	-	2	-	**2**
ACTINOBACULUM URINALE	**2**	-	-	2	-	-	-	-	-	-	**2**
ACTINOBIFIDA	**1**	-	-	-	-	-	-	-	-	-	**1**
ACTINOBISPORA	**1**	-	-	-	-	-	-	-	1	-	**1**
ACTINOCATENISPORA	**1**	-	-	-	-	-	-	-	-	-	**1**
ACTINOCORALLIA	**1**	-	-	1	-	-	-	-	1	-	**1**
ACTINOKINEOSPORA	**1**	-	-	1	-	-	-	-	1	-	**1**
ACTINOMADURA CHIBENSIS	**2**	-	-	-	-	-	-	-	-	-	**2**
ACTINOMADURA LATINA	**2**	-	-	2	-	-	-	-	-	-	**2**
ACTINOMADURA MADURAE	**2**	2	-	2	2	2	2	2	2	2	**2**
ACTINOMADURA PELLETIERI	**2**	2	-	2	2	2	2	2	2	2	**2**
ACTINOMYCES BERNARDIAE	**1**	2	-	-	2	2	2	2	-	2	**1**
ACTINOMYCES BOVIS	**2**	2	-	2	2	2	2	2	2	2	**2**
ACTINOMYCES BOWDENII	**2**	-	-	2	2	2	2	2	-	2	**2**
ACTINOMYCES CANIS	**2**	-	-	2	2	2	2	2	-	2	**2**

ACTINOMYCES CARDIFFENSIS	**2**	-	-	2	2	2	2	2	-	2	**2**
ACTINOMYCES CATULI	**2**	-	-	2	2	2	2	2	-	2	**2**
ACTINOMYCES DENTALIS	**2**	-	-	-	2	2	2	2	1	2	**1**
ACTINOMYCES EUROPAEUS	**2**	-	-	2	2	2	2	2	2	2	**2**
ACTINOMYCES FUNKEI	**2**	-	-	2	2	2	2	2	-	2	**2**
ACTINOMYCES GERENCSERIAE	**2**	2	-	-	2	2	2	2	2	2	**2**
ACTINOMYCES GRAEVENITZII	**2**	-	-	2	2	2	2	2	2	2	**2**
ACTINOMYCES HONGKONGENSIS	**2**	-	-	2	2	2	2	2	-	2	**2**
ACTINOMYCES HORDEOVULNERIS	**2**	2	-	2	2	2	2	2	2	2	**2**
ACTINOMYCES HYOVAGINALIS	**2**	-	2	2	2	2	2	2	2		**2**
ACTINOMYCES ISRAELII	**2**	2	-	2	2	2	2	2	2	2	**2**
ACTINOMYCES MARIMAMMALIUM	**2**	-	-	2	2	2	2	2	-	2	**2**
ACTINOMYCES MEYERI	**2**	2	-	2	2	2	2	2	2	2	**2**
ACTINOMYCES NAESLUNDII	**2**	2	-	2	2	2	2	2	2	2	**2**
ACTINOMYCES NEUII SUBSP. ANITRATIUS	**2**	2	-	2	2	2	2	2	2	2	**2**
ACTINOMYCES NEUII SUBSP. NEULI	**2**	2	-	2	2	2	2	2	2	2	**2**
ACTINOMYCES ODONTOLYTICUS	**2**	2	2	2	2	2	2	2	2	2	**2**
ACTINOMYCES PYOGENES	**1**	2	-	-	2	2	2	2	-	2	**2**
ACTINOMYCES RADICIDENTIS	**2**	-	-	2	2	2	2	2	-	2	**2**
ACTINOMYCES RADINGAE	**2**	-	-	2	2	2	2	2	2	2	**2**
ACTINOMYCES SUIMASTITIDIS	**2**	-	-	2	2	2	2	2	-	2	**2**
ACTINOMYCES SUIS	**1**	2	-	2	2	2	2	2	-	2	**2**
ACTINOMYCES TURICENSIS	**2**	-	-	2	2	2	2	2	2	2	**2**
ACTINOMYCES VACCIMAXILAE	**2**	-	-	2	2	2	2	2	-	2	**2**
ACTINOMYCES VISCOSUS	**2**	2	2	2	2	2	2	2	2	2	**2**
ACTINOMYCETOSPORA	**1**	-	-	-	-	-	-	-	-	-	**1**
ACTINOPLANES	**1**	-	-	1	-	-	-	-	1	-	**1**
ACTINOPOLYMORPHA	**1**	-	-	1	-	-	-	-	-	1	**1**
ACTINOPOLYSPORA	**1**	-	-	1	-	-	-	-	1	-	**1**

ACTINOPYCNIDIUM	1	-	-	-	-	-	-	-	-	-	1
ACTINOSPICA	1	-	-	-	-	-	-	-	-	-	1
ACTINOSPORANGIUM	1	-	-	-	-	-	-	-	-	-	1
ACTINOSYNNEMA	1	-	-	1	-	-	-	-	1	-	1
ACTINOTALEA	1	-	-	-	-	-	-	-	-	-	1
ACTINOTELLURIA	1	-	-	-	-	-	-	-	-	-	1
ADHAERIBACTER	1	-	-	-	-	-	-	-	-	-	1
ADLERCREUTZIA	1	-	-	-	-	-	-	-	-	-	1
AEGYTIANELLA PULLORUM	-	2	-	2	-	2	-	-	2	-	2
AEQUORIVITA	1	-	-	1	-	-	-	-	-	-	1
AEROBACTER	1	-	-	-	-	-	-	-	-	-	1
AEROCOCCUS URINAE	2	2	-	2	-	-	-	-	2	-	2
AEROCOCCUS VIRIDANS	2	2	1	2	-	-	-	-	2	-	2
AEROMICROBIUM	1	-	-	1	-	-	-	-	1	-	1
AEROMONAS ALLOSACCHAROPHILA	2	2	-	2	-	-	-	-	2	-	2
AEROMONA AQUARIORIUM	2	-	-	-	-	-	-	-	-	-	2
AEROMONAS CAVIAE	2	2	1	2	-	-	-	-	2	-	2
AEROMONAS CULICICOLA	2	-	-	1	-	-	-	-	-	-	1
AEROMONAS ENTEROPELOGENES	2	-	-	2	-	OP	-	-	1	-	1
AEROMONAS HYDROPHILA SUB. ANAEROGENES	2	2	2	-	2	-	-	2	-		2
AEROMONAS HYDROPHILA SUBSP. HYDROPHILA	2	2	2	2	-	2	-	-	2	-	2
AEROMONAS HYDROPHILA SUB PROTEOLYTICA	2	2	2	-	2	-	-	2	-		2
AEROMONAS JANDAEI	2	2	-	2	-	OP	-	-	2	-	2
AEROMONAS PUNCTATA	1	2	-	2	-	OP	-	-	2	-	2
AEROMONAS SALMONICIDA SUBSP. MASOUCIDA	2	2	-	2	-	OP	-	-	2	-	2
AEROMONAS SALMONICIDA SUBSP.SALMONICIDA	2	2	1	2	-	3	-	-	2	-	2
AEROMONAS SALMONICIDA SUBSP. SMITHIA	2	2	-	2	-	OP	-	-	2	-	2
AEROMONAS SCHUBERTII	2	2	-	2	-	OP	-	-	2	-	2
AEROMONAS SOBRIA	2	2	-	2	-	OP	-	-	2	-	2

AEROMONAS TROTA	1	2	-	-	-	OP	-	-	2	-	2
AEROMONAS TRUCTI	-	-	-	-	-	-	-	-	2	-	2
AEROMONAS VERONII	-	-	-	-	-	-	-	-	2	-	2
AESTUARIIBACTER	1	-	-	1	-	-	-	-	-	-	1
AESTUARIIMICROBIUM	1	-	-	-	-	-	-	-	-	-	1
AFIPIA BROOMEAE	2	2	-	2	-	-	-	-	2	-	2
AFIPIA CLEVALANDENSIS	2	2	-	2	-	-	-	-	2	-	2
AFIPIA FELIS	2	2	-	2	-	-	-	-	2	-	2
AGARBACTERIUM	1	-	-	-	-	-	-	-	-	-	1
AGGREGATIBACTER ACTINOMYCETEMCOMITANS	-	2	-	-	-	-	-	-	-	-	2
AGGREGATIBACTER APHROPHILUS	-	2	-	-	-	-	-	-	-	-	2
AGGREGATIBACTER SEGNIS	2	2	-	-	-	-	-	-	-	-	2
AGITOCOCCUS	1	-	-	1	-	-	-	-	1	-	1
AGREIA	1	-	-	1	-	-	-	-	-	-	1
AGROBACTERIUM	1	-	-	1	-	-	-	-	1	-	1
AGROCOCCUS	1	-	-	1	-	-	-	-	1	-	1
AGROMONAS	1	-	-	1	-	-	-	-	1	-	1
AGROMYCES	1	-	-	1	-	-	-	-	1	-	1
AHRENSIA	1	-	-	1	-	-	-	-	-	-	1
AKKERMANSIA	-	-	-	1	-	-	-	-	-	-	1
ALBIDOVULUM	1	-	-	1	-	-	-	-	-	-	1
ALBIMONAS	1	-	-	-	-	-	-	-	-	-	1
ALCALIGENES DEFRAGANS	-	-	-	-	-	-	-	-	2	2	2
ALCALIGENES FAECALIS SUBSP. FAECALIS	2	2	1	2	-	OP	-	-	2	2	2
ALCALIGENES PIECHAUDII	2	2	-	-	-	OP	-	-	2	2	2
ALCALIGENES XYLOSOXIDANS	2	2	-	-	-	OP	-	-	2	2	2
ALCANIVORAX	1	-	-	1	-	-	-	-	-	-	1
ALGIBACTER	1	-	-	1	-	-	-	-	-	-	1
ALGICOLA	1	-	-	1	-	-	-	-	-	-	1

ALGORIPHAGUS	1	-	-	1	-	-	-	-	-	-	1
ALICYCLIPHILUS	1	-	-	1	-	-	-	-	-	-	1
ALICYCLOBACILLUS	1	-	1	1	-	-	-	-	1	-	1
ALIIVIBRIO SALMONICIDA	2	-	-	-	-	-	-	-	-	-	2
ALISHEWANELLA	1	-	-	1	-	-	-	-	-	-	1
ALISTIPES ONDERDONKII	2	-	-	1	-	-	-	-	-	-	1
ALISTIPES PUTREDINIS	2	2	-	2	-	-	-	-	-	-	2
ALISTIPES SHAHII	2	-	-	-	-	-	-	-	-	-	2
ALKALIBACILLUS	1	-	-	-	-	-	-	-	-	-	1
ALKALIBACTER	1	-	-	-	-	-	-	-	-	-	1
ALKALIBACTERIUM	1	-	-	1	-	-	-	-	-	-	1
ALKALIFLEXUS	1	-	-	-	-	-	-	-	-	-	1
ALKALILIMNICOLA	1	-	-	-	-	-	-	-	-	-	1
ALKALIMONAS	1	-	-	-	-	-	-	-	-	-	1
ALKALIPHILUS	1	-	-	1	-	-	-	-	-	-	1
ALKALISPIRILLUM	1	-	-	1	-	-	-	-	-	-	1
ALKANINDIGES	1	-	-	1	-	-	-	-	-	-	1
ALLISONELLA	1	-	-	1	-	-	-	-	-	-	1
ALLOBACULUM	1	-	-	-	-	-	-	-	-	-	1
ALLOCHROMATIUM	1	-	-	1	-	-	-	-	-	-	1
ALLOFUSTIS	1	-	-	1	-	-	-	-	-	-	1
ALLOIOCOCCUS OTITIS	-	2	2	2	-	-	-	-	2	-	2
ALLOKUTZNERIA	1	-	-	1	-	-	-	-	-	-	1
ALLOMONAS ENTERICA	-	2	-	1	-	-	-	-	2	-	1
ALLOSCARDOVIA	1	-	-	-	-	-	-	-	-	-	1
ALTERERYTHROBACTER	1	-	-	-	-	-	-	-	-	-	1
ALTEROMONAS HALOPLANCTIS	1	2	-	1	-	2	-	-	-	-	1
ALYSIELLA	1	-	-	1	-	-	-	-	1	-	1
AMINIPHILUS	1	-	-	-	-	-	-	-	-	-	1

AMINOBACTER	**1**	-	-	1	-	-	-	-	1	-	**1**
AMINOBACTERIUM	**1**	-	-	1	-	-	-	-	-	-	**1**
AMINOMONAS	**1**	-	-	1	-	-	-	-	-	-	**1**
AMMONIFEX	**1**	-	-	1	-	-	-	-	1	-	**1**
AMMONIPHILUS	**1**	-	-	1	-	-	-	-	-	-	**1**
AMOEBOBACTER	**1**	-	-	1	-	-	-	-	1	-	**1**
AMORPHOSPORANGIUM	**1**	-	-	1	-	-	-	-	-	-	**1**
AMORPHUS	**1**	-	-	-	-	-	-	-	-	-	**1**
AMPHIBACILLUS	**1**	-	-	1	-	-	-	-	1	-	**1**
AMPHRITEA	**1**	-	-	-	-	-	-	-	-	-	**1**
AMPULLARIELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
AMYCOLATA	**1**	-	-	-	-	-	-	-	-	-	**1**
AMYCOLATOPSIS BENZOATILYTICA	**2**	-	-	1	-	-	-	-	1	-	**2**
AMYCOLATOPSIS KENTUCKYENSIS	**2**	-	-	2	-	-	-	-	1	-	**2**
AMYCOLATOPSIS LEXINTONENSIS	**2**	-	-	2	-	-	-	-	1	-	**2**
AMYCOLATOPSIS PRETORIENSIS	**2**	-	-	2	-	-	-	-	1	-	**2**
ANAEROARCUS	**1**	-	-	1	-	-	-	-	-	-	**1**
ANAEROBACTER	**1**	-	-	1	-	-	-	-	1	-	**1**
ANAEROBACULUM	**1**	-	-	1	-	-	-	-	1	-	**1**
ANAEROBIOSPIRILLUM SUCCINICIPRODUCENS	**2**	-	-	2	-	-	-	-	2	-	**2**
ANAEROBIOSPIRILLUM THOMASII	**2**	-	-	2	-	-	-	-	2	-	**2**
ANAEROBRANCA	**1**	-	-	1	-	-	-	-	1	-	**1**
ANAEROCELLUM	**1**	-	-	-	-	-	-	-	-	-	**1**
ANAEROCOCCUS MURDOCHII	**2**	-	-	1	-	-	-	-	-	-	**1**
ANAEROCOCCUS PREVOTII	**2**	2	-	2	-	-	-	-	-	-	**2**
ANAEROCOCCUS VAGINALIS	**2**	2	-	2	-	-	-	-	-	-	**2**
ANAEROFILUM	**1**	-	-	1	-	-	-	-	1	-	**1**
ANAEROFLEXUS	**1**	-	-	-	-	-	-	-	-	-	**1**
ANAEROFUSTIS	**1**	-	-	-	-	-	-	-	-	-	**1**

ANAEROLINEA	1	-	-	1	-	-	-	-	-	-	1
ANAEROMUSA	1	-	-	1	-	-	-	-	-	-	1
ANAEROPHAGA	1	-	-	1	-	-	-	-	-	-	1
ANAEROPLASMA	1	-	-	1	-	-	-	-	1	-	1
ANAERORHABDUS FURCOSUS	-	2	-	2	-	-	-	-	2	-	2
ANAEROSINUS	1	-	-	1	-	-	-	-	-	-	1
ANAEROSPORA HONGKONGENSIS	2	-	-	-	-	-	-	-	-	-	2
ANAEROSPOROBACTER	1	-	-	-	-	-	-	-	-	-	1
ANAEROSTIPES	1	-	-	1	-	-	-	-	-	-	1
ANAEROTRUNCUS	1	-	-	1	-	-	-	-	-	-	1
ANAEROVIBRIO	1	-	-	1	-	-	-	-	1	-	1
ANAEROVIRGULA	1	-	-	-	-	-	-	-	-	-	1
ANAEROVORAX	1	-	-	1	-	-	-	-	-	-	1
ANAPLASMA CAUDATUM	-	2	-	2	-	2	-	-	2	-	2
ANAPLASMA CENTRALE	-	2	-	2	-	3	-	-	2	-	2
ANAPLASMA MARGINALE	-	2	-	2	-	3	-	-	2	-	2
ANAPLASMA OVIS	-	2	-	2	-	2	-	-	2	-	2
ANAPLASMA PHAGOCYTOPHILUM	-	-	2	-	-	-	-	-	-		2
ANAPLASMA PLATYS	-	-	-	2	-	-	-	-	-	-	2
ANCALOMICROBIUM	1	-	-	1	-	-	-	-	1	-	1
ANCYLOBACTER	1	-	-	1	-	-	-	-	1	-	1
ANDREPREVOTIA	1	-	-	1	-	-	-	-	-	-	1
ANEURINIBACILLUS	1	-	1	1	-	-	-	-	1	-	1
ANGIOCOCCUS	1	-	-	1	-	-	-	-	1	-	1
ANGULOMICROBIUM	1	-	-	1	-	-	-	-	1	-	1
ANOXYBACILLUS	1	-	-	1	-	-	-	-	-	-	1
ANOXYNATRONUM	1	-	-	1	-	-	-	-	-	-	1
ANTARCTOBACTER	1	-	-	1	-	-	-	-	-	-	1
APIOSPORINA MORBOSA	-	2	-	-	-	-	-	-	-	-	2

AQUABACTER	**1**	-	-	1	-	-	-	-	1	-	**1**
AQUABACTERIUM	**1**	-	-	1	-	-	-	-	-	-	**1**
AQUAMICROBIUM	**1**	-	-	1	-	-	-	-	1	-	**1**
AQUASPIRILLUM	**1**	-	1	1	-	-	-	-	1	-	**1**
AQUICELLA	**1**	-	-	1	-	-	-	-	-	-	**1**
AQUIFEX	**1**	-	-	1	-	-	-	-	1	-	**1**
AQUIFLEXUM	**1**	-	-	-	-	-	-	-	-	-	**1**
AQUIMARINA	**1**	-	-	-	-	-	-	-	-	-	**1**
AQUIMONAS	**1**	-	-	-	-	-	-	-	-	-	**1**
AQUINCOLA	**1**	-	-	-	-	-	-	-	-	-	**1**
AQUISALIBACILLUS	**1**	-	-	-	-	-	-	-	-	-	**1**
AQUISALIMONAS	**1**	-	-	-	-	-	-	-	-	-	**1**
ARACHNIA	**1**	-	-	-	-	2	-	-	-	-	**2**
ARCANOBACTERIUM BERNARDIAE	**2**	2	-	2	-	-	-	-	2	-	**2**
ARCANOBACTERIUM BIALOWIEZENSE	**2**	-	-	-	-	-	-	-	-	-	**2**
ARCANOBACTERIUM BONASI	**2**	-	-	-	-	-	-	-	-	-	**2**
ARCANOBACTERIUM HAEMOLYTICUM	**2**	-	2	2	2	2	2	2	2		**2**
ARCANOBACTERIUM PHOCAE	**2**	-	-	2	-	-	-	-	2	-	**2**
ARCANOBACTERIUM PYOGENES	**2**	2	2	2	-	-	2	-	2		**2**
ARCANOBACTERIUM SUIS	**-**	2	-	-	-	-	-	-	-	-	**2**
ARCHANGIUM	**1**	-	-	1	-	-	-	-	1	-	**1**
ARCICELLA	**1**	-	-	1	-	-	-	-	-	-	**1**
ARCOBACTER BUTZLERI	**2**	2	-	2	-	-	-	-	2	-	**2**
ARCOBACTER CIBARIUS	**2**	2	-	-	-	-	-	-	-	-	**2**
ARCOBACTER CRYAEROPHILUS	**2**	-	2	-	-	-	-	2	-		**2**
ARENIBACTER	**1**	-	-	1	-	-	-	-	-	-	**1**
ARENIMONAS	**1**	-	-	-	-	-	-	-	-	-	**1**
ARHODOMONAS	**1**	-	-	1	-	-	-	-	1	-	**1**
ARIZONA	**1**	-	-	-	-	-	-	-	-	-	**1**

ARSENICICOCCUS	1	-	-	1	-	-	-	-	-	-	1
ARSENOPHONUS NASONIAE	1	2	-	1	-	2	-	-	1	-	1
ARTHROBACTER ALBUS	1	-	1	2	-	-	-	-	-	-	2
ARTHROBACTER CREATINOLYTICUS	-	-	-	-	-	-	-	-	2	-	2
ARTHROBACTER CRYSTALLOPOIETES	1	-	1	2	-	-	-	-	1	-	2
ARTHROBACTER GANDAVENSIS	1	-	1	2	-	-	-	-	1	-	2
ARTHROBACTER LUTEOLUS	1	-	1	2	-	-	-	-	1	-	2
ARTHROBACTER WOLUWENSI	1	-	1	2	-	-	-	-	1	-	2
ASACCHAROBACTER	1	-	-	-	-	-	-	-	-	-	1
ASAIA	1	-	-	1	-	-	-	-	-	-	1
ASANOA	1	-	-	1	-	-	-	-	-	-	1
ASIOSPORANGIUM	1	-	-	-	-	-	-	-	-	-	1
ASPROMONAS	1	-	-	-	-	-	-	-	-	-	1
ASTICCACAULIS	1	-	-	1	-	-	-	-	1	-	1
ASTROSPORANGIUM	1	-	-	-	-	-	-	-	-	-	1
ATOPOBIUM FOSSOR	2	2	-	2	-	-	-	-	2	-	2
ATOPOBIUM MINUTUM	2	2	-	2	-	-	-	-	2	-	2
ATOPOBIUM PARVULUM	2	2	-	2	-	-	-	-	2	-	2
ATOPOBIUM RIMAE	2	2	-	2	-	-	-	-	2	-	2
ATOPOBIUM VAGINAE	-	-	-	-	-	-	-	-	2	-	2
ATOPOCOCCUS	1	-	-	-	-	-	-	-	-	-	1
ATOPODIUM MINUTUS	-	2	-	-	-	-	-	-	-	-	2
ATOPOSTIPES	1	-	-	-	-	-	-	-	-	-	1
AURANTIMONAS	1	-	-	-	-	-	-	-	-	-	1
AUREOBACTERIUM	1	-	-	-	-	-	-	-	1	-	1
AVIBACTERIUM ENDOCARDITIDIS	2	-	-	-	-	-	-	-	-	-	2
AVIBACTERIUM GALLINARUM	2	2	-	-	-	-	-	-	-	-	2
AVIBACTERIUM PARAGALLINARUM	-	2	-	-	-	-	-	-	-	-	2
AZOARCUS	1	-	-	1	-	-	-	-	1	-	1

AZOHYDROMONAS	1	-	-	-	-	-	-	-	-	-	1
AZOMONAS	1	-	-	1	-	-	-	-	1	-	1
AZOMONOTRICHON	1	-	-	-	-	-	-	-	-	-	1
AZORHIZOBIUM	1	-	-	1	-	-	-	-	1	-	1
AZORHIZOPHILUS	-	-	1	-	-	-	-	1	-		1
AZOSPIRA	1	-	-	1	-	-	-	-	-	-	1
AZOSPIRILLUM	1	-	-	1	-	-	-	-	1	-	1
AZOTOBACTER	1	-	-	1	-	-	-	-	1	-	1
BACILLUS ANTHRACIS	-	3	-	3	3	3	3	3	3	3	3
BACILLUS CEREUS	2	2	2	2	-	OP	-	-	2	2	2
BACILLUS IDRIENSIS	2	-	-	-	-	-	-	-	-	-	2
BACILLUS INFANTIS	2	-	-	-	-	-	-	-	-	-	2
BACILLUS LENTIMORBUS	-	-	-	-	-	2	-	-	1	-	1
BACILLUS POPULIAE	-	-	-	-	-	2	-	-	1	-	1
BACILLUS SPHAERICUS	2	2	-	1	-	2	-	-	1	-	2
BACILLUS THURINGIENSIS	-	2	-	1	-	2	-	-	1	-	2
BACILLUS WEIHENSTEPHANENSIS	-	-	2	-	-	-	-	1	-		1
BACTERIOLYTICUM	1	-	-	-	-	-	-	-	-	-	1
BACTERIONEMA	1	-	-	-	-	-	-	-	-	-	1
BACTERIOVORAX	1	-	-	1	-	-	-	-	-	-	1
BACTERIUM	1	-	-	-	-	-	-	-	-	-	1
BACTEROIDES CACCAE	2	2	-	2	-	2	-	-	2	2	2
BACTEROIDES CAPILLOSUS	-	2	-	2	-	2	-	-	2	2	2
BACTEROIDES CELLULOSILYTICANS	2	-	-	2	-	2	-	-	1	2	2
BACTEROIDES COAGULANS	2	2	-	2	-	2	-	-	2	2	2
BACTEROIDES DISTASONIS	-	-	-	2	-	2	-	-	2	2	2
BACTEROIDES EGGERTHII	2	2	-	2	-	2	-	-	2	2	2
BACTEROIDES FORSYTHUS	-	-	-	-	-	-	-	-	2	2	2

BACTEROIDES FRAGILIS	**2**	2	2	2	2	2	2	2	2	2	**2**
BACTEROIDES HELCOGENES	**2**	2	-	2	-	2	-	-	2	2	**2**
BACTEROIDES MASSILIENSIS	**2**	-	-	-	-	2	-	-	-	2	**2**
BACTEROIDES NORDII	**2**	-	-	-	-	2	-	-	-	2	**2**
BACTEROIDES OVATUS	**2**	2	2	2	-	2	-	-	2	2	**2**
BACTEROIDES PUTREDINIS	**-**	-	-	-	-	-	-	-	2	2	**2**
BACTEROIDES PYOGENES	**2**	2	-	2	-	2	-	-	2	2	**2**
BACTEROIDES SALYERSIA	**2**	-	-	-	-	2	-	-	-	2	**2**
BACTEROIDES SPLANCHNICUS	**2**	-	2	-	2	-	-	2	2		**2**
BACTEROIDES STERCORIS	**-**	-	-	-	-	-	-	-	2	2	**2**
BACTEROIDES SUIS	**2**	2	-	2	-	2	-	-	2	2	**2**
BACTEROIDES TECTUS	**2**	2	-	2	-	2	-	-	2	2	**2**
BACTEROIDES THETAIOTAOMICRON	**2**	2	2	2	-	2	-	-	2	2	**2**
BACTEROIDES UNIFORMIS	**2**	2	2	2	-	2	-	-	2	2	**2**
BACTEROIDES UREOLYTICUS	**2**	2	2	2	-	2	-	-	2	2	**2**
BACTEROIDES VULGATUS	**-**	-	2	1	-	2	-	-	1	2	**2**
BACTEROIDES XYLANISOLVENS	**-**	-	1	-	2	-	-	1	2		**2**
BALNEARIUM	**1**	-	-	1	-	-	-	-	-	-	**1**
BALNEATRIX ALPICUM	**2**	2	-	2	-	-	-	-	2	-	**2**
BALNEOLA	**1**	-	-	-	-	-	-	-	-	-	**1**
BARNESIELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
BARTONELLA ALSATICA	**-**	-	-	-	-	-	-	-	2	2	**2**
BARTONELLA BACILLIFORMIS	**2**	-	2	2	2	2	2	2	2		**2**
BARTONELLA BIRTLESII	**2**	-	-	2	2	2	2	-	-	2	**2**
BARTONELLA BOVIS	**2**	-	-	2	2	2	2	-	-	2	**2**
BARTONELLA CAPREOLI	**2**	-	-	2	2	2	2	-	-	2	**2**
BARTONELLA CLARRIDGEIAE	**-**	-	-	2	2	2	2	-	2	2	**2**
BARTONELLA DOSHIAE	**-**	3	-	2	2	2	2	-	2	2	**2**
BARTONELLA ELIZABETHA	**-**	3	-	2	2	2	2	-	2	2	**2**

BARTONELLA GRAHAMII	-	3	-	2	2	2	2	-	2	2	2
BARTONELLA HENSELAE	-	-	-	2	2	2	2	-	2	2	2
BARTONELLA PEROMYSCI	2	-	3	-	2	2	2	2	-	2	2
BARTONELLA QUINTANA	2	3	-	2	2	2	2	-	2	2	2
BARTONELLA SCHOENBUCHENSIS	-	-	2	2	2	2	-	-	2		2
BARTONELLA TALPAE	-	3	-	2	2	2	2	-	2	2	2
BARTONELLA TAYLORII	-	3	-	2	2	2	2	-	2	2	2
BARTONELLA TRIBOCORUM	-	-	-	-	-	-	-	-	2	2	2
BARTONELLA VINSONII	-	3	-	2	2	2	2	-	2	2	2
BDELLOVIBRIO	1	-	-	1	2	-	-	-	1	-	1
BEGGIATOA	1	-	-	1	-	-	-	-	1	-	1
BEIJERINCKIA	1	-	-	1	-	-	-	-	1	-	1
BELLIELLA	1	-	-	1	-	-	-	-	-	-	1
BELLILINEA	1	-	-	-	-	-	-	-	-	-	1
BELNAPIA	1	-	-	-	-	-	-	-	-	-	1
BENECKEA	1	-	-	-	-	2	-	-	1	-	1
BERGERIELLA	1	-	-	-	-	-	-	-	2	-	1
BERGEYELLA ZOOHELCUM	2	2	-	-	-	-	-	-	-	-	2
BETABACTERIUM	1	-	-	-	-	-	-	-	-	-	1
BEUTENBERGIA	1	-	-	1	-	-	-	-	-	-	1
BIFIDOBACTERIUM DENTIUM	2	2	-	2	-	-	-	-	2	-	2
BILOPHILA WADSWORTHIA	2	2	-	2	-	-	-	-	2	-	2
BIOSTRATICOLA	1	-	-	-	-	-	-	-	-	-	1
BIZIONIA	1	-	-	-	-	-	-	-	-	-	1
BLASTOBACTER	1	-	-	1	-	-	-	-	1	-	1
BLASTOCHLORIS	1	-	-	1	-	-	-	-	1	-	1
BLASTOCOCCUS	1	-	-	1	-	-	-	-	1	-	1
BLASTOMONAS	1	-	-	1	-	-	-	-	1	-	1
BLASTOPIRELLULA	1	-	-	1	-	-	-	-	-	-	1

BLATTABACTERIUM	-	-	-	-	-	-	-	-	1	-	1
BLAUTIA	1	-	-	-	-	-	-	-	-	-	1
BOGORIELLA	1	-	-	1	-	-	-	-	1	-	1
BORDETELLA AVIUM	2	2	-	2	-	2	-	-	2	2	2
BORDETELLA BRONCHISEPTICA	2	2	2	2	2	2 3	2	2	2	-	2
BORDETELLA HINZII	2	2	2	-	2	-	2	-	-	2	2
BORDETELLA HOLMESII	2	-	-	2	-	2	-	-	2	-	2
BORDETELLA PARAPERTUSSIS	2	2	2	2	2	2	2	2	2		2
BORDETELLA PERTUSSIS	2	2	2	2	2	2	2	2	2	2	2
BORDETELLA TREMATUM	2	-	-	2	-	2	-	-	2	-	2
BORRELIA AFZELII	2	-	-	2	2	2	2	2	2	2	2
BORRELIA ANSERINA	-	2	-	2	2	2	2	2	2	2	2
BORRELIA BALTAZARDII	-	2	-	2	2	2	2	2	2	2	2
BORRELIA BISSETTII	2	-	-	2	2	2	2	2	-	2	2
BORRELIA BRASILIENSIS	-	2	-	2	2	2	2	2	2	2	2
BORRELIA BURGDORFERI	2	2	-	2	2	2	2	2	2	2	2
BORRELIA CALIFORNENSIS	2	-	-	2	2	2	2	2	-	2	2
BORRELIA CAUCASICA	-	2	-	2	2	2	2	2	2	2	2
BORRELIA CORIACEAE	-	2	-	2	2	2 3	2	2	2	2	2
BORRELIA CROCIDURAE	-	2	-	2	2	2	2	2	2	2	2
BORRELIA DUGESII	-	2	-	2	2	2	2	2	2	2	2
BORRELIA DUTTONII	-	2	-	2	2	2	2	2	2	2	2
BORRELIA GARINII	-	2	-	2	2	2	2	2	2	2	2
BORRELIA GRAINGERI	2	-	2	-	2	2	2	2	2	2	2
BORRELIA GENOMOSPECIES 1	2	-	-	2	2	2	2	2	-	2	2
BORRELIA GENOMOSPECIES 2	2	-	-	2	2	2	2	2	-	2	2
BORRELIA HARVEYI	-	2	-	2	2	2	2	2	2	2	2
BORRELIA HERMSII	2	2	-	2	2	2	2	2	2	2	2
BORRELIA HISPANICA	-	2	-	2	2	2	2	2	2	2	2

BORRELIA LATYSCHEWII	-	2	-	2	2	2	2	2	2	2	2
BORRELIA MAZZOTTI	-	2	-	2	2	2	2	2	2	2	2
BORRELIA PARKERI	-	2	-	2	2	2	2	2	2	2	2
BORRELIA PERSICA	-	2	-	2	2	2	2	2	2	2	2
BORRELIA RECURRENTIS	-	2	-	2	2	2	2	2	2	2	2
BORRELIA SPIELMANII	2	-	-	-	2	2	2	2	-	2	2
BORRELIA THEILERI	-	2	-	2	2	2	2	2	-	2	2
BORRELIA TANULII	-	-	-	-	-	-	-	-	2	2	2
BORRELIA TILAE	-	2	-	2	2	2	2	2	-	2	2
BORRELIA TURICATAE	-	2	-	2	2	2	2	2	2	2	2
BORRELIA VALAISIANA	2	-	-	2	2	2	2	2	2	2	2
BORRELIA VENEZUELENSIS	-	2	-	2	2	2	2	2	2	2	2
BORRELIA VINCENTI	-	2	-	-	2	2	2	2	-	2	2
BOSEA	1	-	-	1	-	-	-	-	1	-	1
BOWMANELLA AALBORGI	1	-	-	-	-	-	-	-	-	-	1
BRACHYBACTERIUM	1	-	-	1	-	-	-	-	1	-	1
BRACHYMONAS	1	-	-	1	-	-	-	-	1	-	1
BRACHYSPIRA AALBORG1	1	2	-	2	-	-	2	-	2	-	2
BRACHYSPIRA ALVINIPULLI	-	-	-	-	-	-	-	-	2	-	2
BRACHYSPIRA HYODYSENTERIA	1	2	-	2	-	-	2	-	2	-	2
BRACHYSPIRA INNOCENS	-	-	-	-	-	-	-	-	2	-	2
BRACHYSPIRA PILOSICOLI	-	-	-	-	-	-	-	-	2	-	2
BRACKIELLA OEDIPODIS	2	-	-	2	-	-	-	-	-	-	2
BRADYRHIZOBIUM	1	-	-	1	-	-	-	-	1	-	1
BRANHAMELLA	1	-	-	-	-	-	-	-	-	-	1
BRENNERIA	1	-	-	1	-	-	-	-	1	-	1
BREVIBACILLUS	1	-	1	1	-	-	-	-	1	-	1
BREVIBACTERIUM AVIUM	2	-	-	2	-	-	-	-	2	-	2
BREVIBACTERIUM MCBRELLNERI	2	2	-	2	-	-	-	-	2	-	2

BREVIBACTERIUM OTITIDIS	-	-	-	-	-	-	-	-	2	-	2
BREVIBACTERIUM PAUCIVORANS	2	-	-	2	-	-	-	-	-	-	2
BREVIBACTERIUM SANGUINIS	2	-	-	2	-	-	-	-	-	-	2
BREVINEMA ANDERSONII	-	2	-	2	-	-	-	-	2	-	2
BREVUNDIMONAS DIMINUTA	2	2	1	2	-	-	-	-	2	-	1
BREVUNDIMONAS VESICULARIS	-	2	-	1	-	-	-	-	1	-	2
BROCHOTHRIX	1	-	1	1	-	-	-	-	1	-	1
BROOKLAWNIA	1	-	-	-	-	-	-	-	-	-	1
BRUCELLA ABORTUS	-	3	-	3	3	3	3	3	3	3	3
BRUCELLA CANIS	-	3	3	3	3	3	3	3	3	3	3
BRUCELLA MELITENSIS	-	3	-	3	3	3	3	3	3	3	3
BRUCELLA OVIS	-	3	-	3	-	3	-	-	3	-	3
BRUCELLA SUIS	-	3	-	3	3	3	3	3	3	3	3
BRYANTELLA	1	-	-	1	-	-	-	-	-	-	1
BUDVICIA	1	-	1	1	-	-	-	-	-	-	1
BULLEIDIA EXTRUCTA	2	-	-	2	-	-	-	-	-	-	2
BURKHOLDERIA AMBIFARIA	2	-	-	2	-	-	-	-	-	-	2
BURKHOLDERIA CENOCEPACIA	2	-	-	2	-	-	-	-	-	-	2
BURKHOLDERIA CEPACIA	2	-	2	2	-	OP	-	-	2	2	2
BURKHOLDERIA DOLOSA	2	-	-	2	-	-	-	-	-	-	2
BURKHOLDERIA MALLEI	-	3	-	3	3	3	3	3	3	3	3
BURKHOLDERIA MULTIVORANS	2	-	-	2	-	-	-	-	2	-	2
BURKHOLDERIA PSEUDOMALLEI	-	3	-	3	3	3	3	3	3	3	3
BURKHOLDERIA STABILIS	2	-	-	2	-	-	-	-	-	-	2
BURKHOLDERIA VIETNAMENSIS	2	-	-	2	-	-	-	-	2	-	2
BUTTIAUXELLA	1	-	-	1	-	-	-	-	1	-	1
BUTYRIBACTERIUM METHYLOTROPHICUM	2	-	-	-	-	-	-	-	-	-	2
BUTYRIVIBRIO	1	-	-	1	-	-	-	-	1	-	1
BYSSOPHAGA	1	-	-	-	-	-	-	-	-	-	1

BYSSOVORAX PARACONJUGATUS	1	-	-	-	-	-	-	-	-	-	1
CAEDIBACTER CARYOPHILA	-	2	-	1	-	-	-	-	1	-	1
CAEDIBACTER PARACONJUGATUS	-	2	-	1	-	-	-	-	1	-	1
CAEDIBACTER PSEUDONUTANS	-	2	-	1	-	-	-	-	1	-	1
CAEDIBACTER TAENIOSPIRALIS	-	2	-	1	-	-	-	-	1	-	1
CAENIBACTER VARICAEDENS	1	-	-	1	-	-	-	-	1	-	1
CAENIMONAS	1	-	-	-	-	-	-	-	1	-	1
CALDALKALIBACILLUS	1	-	-	-	-	-	-	-	-	-	1
CALDANAEROBACTER	1	-	-	1	-	-	-	-	-	-	1
CALDANAEROBIUS	1	-	-	-	-	-	-	-	-	-	1
CALDEROBACTERIUM	1	-	-	-	-	-	-	-	1	-	1
CALDICELLULOSIRUPTOR	1	-	-	1	-	-	-	-	1	-	1
CALDILINEA	1	-	-	1	-	-	-	-	-	-	1
CALDITERRIVIBRIO	1	-	-	-	-	-	-	-	-	-	1
CALDITHRIX	1	-	-	1	-	-	-	-	-	-	1
CALDOCELLUM	1	-	-	-	-	-	-	-	-	-	1
CALORAMATOR	1	-	-	1	-	-	-	-	1	-	1
CALORANAEROBACTER	1	-	-	1	-	-	-	-	-	-	1
CALYMMATOBACTERIUM GRANULOMATIS	-	2	-	-	-	-	-	-	2	-	2
CAMINIBACILLUS	1	-	-	-	-	-	-	-	-	-	1
CAMINIBACTER	1	-	-	1	-	-	-	-	-	-	1
CAMINICELLA	1	-	-	1	-	-	-	-	-	-	1
CAMPYLOBACTER COLI	-	2	2	2	2	2	2	2	2	2	2
CAMPYLOBACTER CONCISUS	2	2	-	2	2	2	2	2	2	2	2
CAMPYLOBACTER CURVUS	2	2	-	2	2	2	2	2	2	2	2
CAMPYLOBACTER FETUS	2	2	-	2	2	2 3	2	2	2	2	2
CAMPYLOBACTER GRACILIS	2	2	-	2	2	2	2	2	2	2	2
CAMPYLOBACTER HYOILEI	2	2	-	2	2	2	2	2	2	2	2

CAMPYLOBACTER HYOINTESTINALIS	**2**	2	-	1	2	2	2	2	2	2	**2**
CAMPYLOBACTER JEJUNI	**2**	2	2	2	2	2	2	2	2	2	**2**
CAMPYLOBACTER LARI	**2**	2	-	2	2	2	2	2	2	2	**2**
CAMPYLOBACTER MUCOSALIS	**2**	2	-	2	2	2	2	2	2	2	**2**
CAMPYLOBACTER RECTUS	**2**	2	-	2	2	2	2	2	2	2	**2**
CAMPYLOBACTER SPUTORUM	**2**	2	-	2	2	2	2	2	2	2	**2**
CAMPYLOBACTER UPSALIENSIS	**2**	2	-	2	2	2	2	2	2	2	**2**
CAPNOCYTOPHAGA CANIMORSUS	**2**	2	-	2	-	-	-	-	2	-	**2**
CAPNOCYTOPHAGA CYNODEGMI	**2**	2	-	2	-	-	-	-	2	-	**2**
CAPNOCYTOPHAGA GINGIVALIS	**2**	2	-	2	-	-	-	-	2	-	**2**
CAPNOCYTOPHAGA GRANULOSA	**2**	2	-	2	-	-	-	-	2	-	**2**
CAPNOCYTOPHAGA HAEMOLYTICA	**2**	2	-	2	-	-	-	-	2	-	**2**
CAPNOCYTOPHAGA OCHRACEA	**2**	2	-	2	-	-	-	-	2	-	**2**
CAPNOCYTOPHAGA SPUTIGENA	**2**	2	2	2	-	-	-	-	2	-	**2**
CARBOPHILUS	**1**	-	-	`-	-	-	-	-	1	-	**1**
CARBOXYDIBRACHIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
CARBOXYDOBRACHIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
CARBOXYDOCELLA	**1**	-	-	1	-	-	-	-	-	-	**1**
CARBOXYDOTHERMUS	**1**	-	-	1	-	-	-	-	1	-	**1**
CARDIOBACTERIUM HOMINIS	**2**	2	-	2	2	2	2	2	2	2	**2**
CARDIOBACTERIUM VALVARUM	**2**	-	-	2	-	-	-	-	-	-	**2**
CARNOBACTERIUM MALTAROMATICUM	**2**	-	-	2	-	-	-	-	-	-	**2**
CARNOBACTERIUM PISCICOLA	**-**	-	-	-	-	2	-	-	1	-	**1**
CARYOPHANON	**1**	-	-	1	-	-	-	-	1	-	**1**
CASEOBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
CASTELLANIELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
CATELLATOSPORA	**1**	-	-	1	-	-	-	-	1	-	**1**
CATELLIBACTERIUM	**1**	-	-	1	-	-	-	-	-	-	**1**
CATELLICOCCUS	**1**	-	-	-	-	-	-	-	-	-	**1**

CATELLIGLOBOSISPORA	1	-	-	-	-	-	-	-	-	-	1
CATENIBACTERIUM	1	-	-	1	-	-	-	-	-	-	1
CATENOCOCCUS	1	-	-	1	-	-	-	-	1	-	1
CATENULISPORA	1	-	-	-	-	-	-	-	-	-	1
CATENULOPLANES	1	-	-	1	-	-	-	-	1	-	1
CATONELLA MORBI	-	2	-	2	-	-	-	-	2	-	2
CAULOBACTER	1	-	-	1	-	-	-	-	1	-	1
CEDECEA DAVISAE	2	2	-	2	-	-	-	-	2	-	2
CEDECEA LAPAGEI	2	2	-	2	-	-	-	-	2	-	2
CEDECEA NETERI	2	2	2	2	-	-	-	-	2	-	2
CELLULOMONAS DENVERENSIS	2	-	-	1	-	-	-	-	-	-	1
CELLULOMONAS HOMINS	-	-	-	-	-	-	-	-	2	-	2
CELLULOPHAGA	1	-	-	1	-	-	-	-	-	-	1
CELLULOSIMICROBIUM CELLULANS	-	-	1	1	-	-	-	-	-	-	1
CELLULOSIMICROBIUM FUNKEI	2	-	-	1	-	-	-	-	-	-	1
CELLVIBRIO	1	-	-	1	-	-	-	-	1	-	1
CENTIPEDA PERIODONTII	2	2	-	2	-	-	-	-	2	-	2
CERASIBACILLUS	1	-	-	1	-	-	-	-	-	-	1
CETOBACTERIUM CETI	-	-	-	2	-	-	-	-	1	-	1
CHAINIA	1	-	-	-	-	-	-	-	-	-	1
CHELATOBACTER	1	-	-	-	-	-	-	-	1	-	1
CHELATOCOCCUS	1	-	-	1	-	-	-	-	1	-	1
CHIMAEREICELLA	1	-	-	-	-	-	-	-	-	-	1
CHITINIBACTER	1	-	-	1	-	-	-	-	-	-	1
CHITINIMONAS	1	-	-	1	-	-	-	-	-	-	1
CHITINOPHAGA	1	-	-	1	-	-	-	-	1	-	1
CHLAMYDIA PECORUM	-	2	-	2	-	-	-	-	2	-	2
CHLAMYDIA MURIDARUM	-	-	-	-	-	-	-	-	2	-	2
CHLAMYDIA TRACHOMATIS	2	2	-	2	2	2	2	2	2	2	2

CHLAMYDOPHILA ABORTUS	-	-	-	-	-	-	2	-	2	-	2
CHLAMYDOPHILA CAVIAE	-	-	-	-	-	-	-	-	2	-	2
CHLAMYDOPHILA FELIS	-	-	-	-	-	-	-	-	2	-	2
CHLAMYDOPHILA PNEUMONIAE	2	2	-	2	2	2	2	2	2	2	2
CHLAMYDOPHILA PSITTACI	-	2 3	-	2	2 3	3	3	2 3	2 3	2 3	2
CHLOROBACULUM	1	-	-	1	-	-	-	-	-	-	1
CHLOROBIUM	1	-	-	1	-	-	-	-	1	-	1
CHLOROFLEXUS	1	-	-	1	-	-	-	-	1	-	1
CHONDROCOCCUS	1	-	-	-	-	-	-	-	-	-	1
CHONDROMYCES	1	-	-	1	-	-	-	-	1	-	1
CHROMATIUM	1	-	-	1	-	-	-	-	1	-	1
CHROMOBACTERIUM HAEMOLYTICUM	2	-	-	-	-	-	-	-	-	-	2
CHROMOBACTERIUM VIOLACEUM	2	2	-	2	-	-	-	-	2	-	2
CHROMOBACTERIUM VISCOSUM	2	-	-	-	-	-	-	-	-	-	2
CHROMOHALOBACTER	1	-	-	1	-	-	-	-	1	-	1
CHRYSEOBACTERIUM GLEUM	2	2	-	2	-	-	-	-	2	-	2
CHRYSEOBACTERIUM INDOLOGENES	2	2	-	2	-	-	-	-	2	-	2
CHRYSEOBACTERIUM MENINGOSEPTICUM	-	-	-	2	-	2	-	-	2	-	2
CHRYSEOBACTERIUM SCOPHTHALMUM	2	2	-	2	-	-	-	-	2	-	2
CHRYSEOMONAS LUTEOLA	2	2	-	-	-	-	-	-	-	-	2
CHRYSEOMONAS POLYTRICHA	-	2	-	-	-	-	-	-	-	-	2
CHRYSIOGENES	1	-	-	1	-	-	-	-	1	-	1
CITREICELLA	1	-	-	-	-	-	-	-	-	-	1
CITRICOCCUS	1	-	-	1	-	-	-	-	-	-	1
CITROBACTER AMALONATICUS	2	2	-	2	-	OP	-	-	2	-	2
CITROBACTER BRAAKII	2	2	1	2	-	OP	-	-	2	-	2
CITROBACTER FARMERI	2	2	-	2	-	OP	-	-	2	-	2
CITROBACTER FREUNDII	2	2	1	2	-	OP	-	-	2	-	2
CITROBACTER GILLENII	2	-	-	2	-	OP	-	-	-	-	2

CITROBACTER KOSERI	**2**	2	1	2	-	OP	-	-	2	-	**2**
CITROBACTER MURLINIAE	**2**	-	-	2	-	OP	-	-	-	-	**2**
CITROBACTER RODENTIUM	**2**	-	-	2	-	OP	-	-	2	-	**2**
CITROBACTER SEDLAKII	**2**	2	-	2	-	OP	-	-	2	-	**2**
CITROBACTER WERKMANII	**2**	2	-	2	-	OP	-	-	2	-	**2**
CITROBACTER YOUNGAE	**2**	2	-	2	-	OP	-	-	2	-	**2**
CLAVIBACTER MICHIGANENSIS	**2**	-	-	1	-	-	-	-	2	-	**1**
CLAVISPORANGIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
CLOACIBACILLUS	**1**	-	-	-	-	-	-	-	-	-	**1**
CLOACIBACTERIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
CLOSTRIDIISALIBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
CLOSTRIDIUM ABSONUM	**-**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM ALDENENSE	**2**	-	-	-	2	2	2	2	-	2	**2**
CLOSTRIDIUM ARGENTINENSE	**-**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM BARATII	**2**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM BIFERMENTANS	**2**	2	1	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM BOTULINUM	**-**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM BUTYRICUM	**-**	2	-	2	2	2	2	2	1	2	**2**
CLOSTRIDIUM CADAVERIS	**2**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM CARNIS	**2**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM CHAUVOEI	**2**	2	-	2	2	3	2	2	2	2	**2**
CLOSTRIDIUM CHITONIAE	**2**	-	-	-	2	2	2	2	-	2	**2**
CLOSTRIDIUM CLOSTRIDIOFORME	**2**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM COLINUM	**2**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM DIFFICILE	**2**	2	2	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM FALLAX	**2**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM FRIGIDICARNIS	**-**	-	-	-	-	-	-	-	2	2	**2**
CLOSTRIDIUM GHONII	**2**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM GLYCOLICUM	**2**	2	-	2	2	2	2	2	2	2	**2**

CLOSTRIDIUM HAEMOLYTICUM	**2**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM HASTIFORME	**-**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM HISTOLYTICUM	**2**	2	2	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM INDOLIS	**2**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM INNOCUUM	**2**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM LIMOSUM	**2**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM MALENOMINATUM	**2**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM NOVYI	**2**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM OROTICUM	**2**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM PARAPUTRIFICUM	**2**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM PERFRINGENS	**2**	2	2	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM PILIFORME	**-**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM PUTRIFICUM	**2**	2	-	-	2	2	2	2	2	2	**2**
CLOSTRIDIUM RAMOSUM	**2**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM SCHIRMACHERENSE	**2**	-	-	-	2	2	2	2	-	2	**2**
CLOSTRIDIUM SEPTICUM	**2**	2	2	2	2	3	2	2	2	2	**2**
CLOSTRIDIUM SORDELLII	**2**	2	2	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM SPHENOIDES	**2**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM SPOROGENES	**2**	2	1	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM SUBTERMINALE	**2**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM SYMBIOSUM	**2**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM TERTIUM	**2**	2	-	2	2	2	2	2	2	2	**2**
CLOSTRIDIUM TETANI	**2**	2	-	2	2	2	2	2	2	2	**2**
COBETIA	**1**	-	-	1	-	-	-	-	-	-	**1**
COHAESIBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
COHNELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
COLLIMONAS	**1**	-	-	1	-	-	-	-	-	-	**1**
COLLINSELLA AEROFACIENS	**2**	2	-	2	-	-	-	-	-	-	**2**
COLWELLIA	**1**	-	-	1	-	-	-	-	1	-	**1**

COMAMONAS AQUATICA	**2**	-	-	2	-	-	-	-	-	-	**2**
COMAMONAS KERSTERSII	**2**	-	-	2	-	-	-	-	-	-	**2**
COMAMONAS TERRIGENA	**2**	2	-	2	-	-	-	-	2	-	**2**
COMAMONAS TESTOSTERONI	**-**	2	-	1	-	-	-	-	-	-	**2**
CONCHIFORMIBIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
CONCHIFORMIBIUS	**1**	-	-	-	-	-	-	-	-	-	**1**
CONEXIBACTER	**1**	-	-	1	-	-	-	-	-	-	**1**
COPROTHERMOBACTER	**1**	-	-	1	-	-	-	-	1	-	**1**
CORALIOMARGARITA	**1**	-	-	-	-	-	-	-	-	-	**1**
CORALLOCOCCUS	**1**	-	-	-	-	-	-	-	-	-	**1**
CORIOBACTERIUM	**1**	-	-	1	-	-	-	-	1	-	**1**
CORYNEBACTERIUM ACCOLENS	**2**	2	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM AFERMENTANS	**2**	2	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM AMYCOLATUM	**2**	-	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM ARGENTORATENSE	**2**	-	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM AURIS	**2**	-	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM AURISCANIS	**2**	-	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM BETICOLA	**-**	2	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM BOVIS	**2**	2	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM CAMPOREALENSIS	**2**	-	-	2	2	2	2	2	-	2	**2**
CORYNEBACTERIUM CASPIUM	**2**	-	-	-	2	2	2	2	-	2	**2**
CORYNEBACTERIUM CONFUSUM	**2**	-	-	2	2	2	2	2	-	2	**2**
CORYNEBACTERIUM COYLEAE	**2**	-	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM CYSTITIDIS	**2**	2	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM DIPHTERIAE	**2**	2	2	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM FALSENII	**2**	-	-	2	2	2	2	2	-	2	**2**
CORYNEBACTERIUM FELINUM	**2**	-	-	-	2	2	2	2	-	2	**2**
CORYNEBACTERIUM FRENEYI	**2**	-	-	2	2	2	2	2	-	2	**2**
CORYNEBACTERIUM GLUCURONOLYTICUM	**2**	-	-	2	2	2	2	2	-	2	**2**

CORYNEBACTERIUM HANSENII	**2**	-	-	-	2	2	2	2	-	2	**2**
CORYNEBACTERIUM HOAGII	**-**	2	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM IMITANS	**2**	-	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM JEIKEIUM	**2**	2	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM MACGINLEYI	**2**	2	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM MASTITIDIS	**2**	-	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM MATRUCHOTII	**2**	2	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM MINUTISSIMUM	**2**	2	2	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM MUCIFACIENS	**2**	-	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM MYCETOIDES	**2**	2	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM NIGRICANS	**-**	-	-	2	2	2	2	2	-	2	**2**
CORYNEBACTERIUM PHOCAE	**-**	-	-	-	-	-	-	-	2	2	**2**
CORYNEBACTERIUM PILOSUM	**2**	2	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM PROPINQUUM	**2**	2	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM PSEUDODIPHTERITICUM	**2**	2	1	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM PSEUDOTUBERCULOSIS	**2**	2	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM RENALE	**2**	2	2	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM RESISTENS	**2**	-	-	-	2	2	2	2	-	2	**2**
CORYNEBACTERIUM RIEGELII	**2**	-	-	2	2	2	2	2	-	2	**2**
CORYNEBACTERIUM SIMULANS	**2**	-	-	2	2	2	2	2	-	2	**2**
CORYNEBACTERIUM STRIATUM	**2**	2	1	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM SUICORDIS	**2**	-	-	2	2	2	2	2	-	2	**2**
CORYNEBACTERIUM SUNDSVALLENSE	**2**	-	-	2	2	2	2	2	-	2	**2**
CORYNEBACTERIUM TESTUDINORIS	**2**	-	-	-	2	2	2	2	-	2	**2**
CORYNEBACTERIUM THOMSSENII	**2**	-	-	2	2	2	2	2	-	2	**2**
CORYNEBACTERIUM TUBERCULOSTEARICUM	**-**	-	2	2	2	2	2	-	2		**2**
CORYNEBACTERIUM TUSCANIENSE	**2**	-	-	-	2	2	2	2	-	2	**2**
CORYNEBACTERIUM ULCERANS	**2**	2	-	2	2	2	2	2	2	2	**2**
CORYNEBACTERIUM UREALYTICUM	**2**	2	-	2	2	2	2	2	2	2	**2**

CORYNEBACTERIUM UREICELERIVORANS	**2**	-	-	-	2	2	2	2	-	2	**2**
CORYNEBACTERIUM XEROSIS	**2**	2	1	2	2	2	2	2	2	2	**2**
COUCHIOPLANES	**1**	-	-	1	-	-	-	-	1	-	**1**
COWDRIA RUMINANTIUM	**-**	2	-	-	-	3	-	-	2	-	**2**
COXIELLA BURNETII	**-**	3	-	3	3	3	3	3	3	3	**3**
CRABTREELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
CRONOBACTER DUBLINENSIS	**2**	-	-	-	-	-	-	-	-	-	**2**
CRONOBACTER MALONATICUS	**2**	-	-	-	-	-	-	-	-	-	**2**
CRONOBACTER MUYTJENSII	**2**	-	-	-	-	-	-	-	-	-	**2**
CRONOBACTER SAKAZAKII	**2**	-	-	-	-	-	-	-	-	-	**2**
CRONOBACTER TURICENSIS	**2**	-	-	-	-	-	-	-	-	-	**2**
CROSSIELLA EQUI	**2**	-	-	2	-	-	-	-	-	-	**2**
CRUSTIBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
CRUSTIBACTERIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
CRYOBACTERIUM	**1**	-	-	1	-	-	-	-	1	-	**1**
CRYPTANAEROBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
CRYPTOBACTERIUM PAUCULUS	**1**	-	-	1	-	-	-	-	-	-	**1**
CRYPTOSPORANGIUM	**1**	-	-	1	-	-	-	-	-	-	**1**
CUCUMIBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
CUPRIAVIDUS	**2**	-	-	-	-	-	-	-	-	-	**2**
CUPRIAVIDUS RESPIRACULI	**2**	-	-	-	-	-	-	-	-	-	**2**
CURTOBACTERIUM	**1**	-	-	1	-	-	-	-	-	-	**1**
CURVIBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
CYCLOBACTERIUM	**1**	-	-	1	-	-	-	-	1	-	**1**
CYSTOBACTER	**1**	-	-	1	-	-	-	-	1	-	**1**
CYTOPHAGA ALLERGINAE	**2**	-	-	-	-	2	-	-	-	-	**2**
CYTOPHAGA COLUMNARIS	**-**	-	-	-	-	-	-	-	2	-	**2**
CYTOPHAGA PSYCHROPHILA	**-**	-	-	-	-	-	-	-	2	-	**2**

DACTYLOSPORANGIUM	**1**	-	-	1	-	-	-	-	1	-	**1**
DAEGUIA	**1**	-	-	-	-	-	-	-	-	-	**1**
DASANIA	**1**	-	-	-	-	-	-	-	-	-	**1**
DECHLOROMONAS	**1**	-	-	1	-	-	-	-	-	-	**1**
DECHLOROSOMA	**1**	-	-	-	-	-	-	-	-	-	**1**
DEEFGEA	**1**	-	-	-	-	-	-	-	-	-	**1**
DEFERRIBACTER	**1**	-	-	1	-	-	-	-	1	-	**1**
DEFLUVIBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
DEHALOBACTER	**1**	-	-	1	-	-	-	-	-	-	**1**
DEHALOSPIRILLUM	**1**	-	-	-	-	-	-	-	-	-	**1**
DEINOBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
DEINOCOCCUS	**1**	-	1	1	-	-	-	-	1	-	**1**
DELEYA AQUAMARINA	**1**	2	-	-	-	-	-	-	-	-	**1**
DELFTIA ACIDOVORANS	**2**	-	1	2	-	-	-	-	-	-	**2**
DEMEQUINA	**1**	-	-	-	-	-	-	-	-	-	**1**
DEMETRIA	**1**	-	-	1	-	-	-	-	1	-	**1**
DENDROSPOROBACTER	**1**	-	-	1	-	-	-	-	-	-	**1**
DENITRATISOMA	**1**	-	-	-	-	-	-	-	-	-	**1**
DENITROBACTERIUM	**1**	-	-	1	-	-	-	-	-	-	**1**
DENITROVIBRIO	**1**	-	-	1	-	-	-	-	-	-	**1**
DERMABACTER	**1**	-	-	1	-	-	-	-	1	-	**1**
DERMACOCCUS	**1**	-	-	1	-	-	-	-	1	-	**1**
DERMATOPHILUS CHELONAE	**2**	2	-	2	-	2	-	-	2	-	**2**
DERMATOPHILUS CONGOLENSIS	**2**	2	-	2	-	2 3	-	-	2	-	**2**
DERXIA	**1**	-	-	1	-	-	-	-	1	-	**1**
DESEMZIA	**1**	-	-	1	-	-	-	-	-	-	**1**
DESMOSPORA	**1**	-	-	-	-	-	-	-	-	-	**1**
DESULFACINUM	**1**	-	-	1	-	-	-	-	1	-	**1**
DESULFARCULUS	**1**	-	-	-	-	-	-	-	-	-	**1**

DESULFATIBACILLUM	1	-	-	1	-	-	-	-	-	-	1
DESULFATIFERULA	1	-	-	-	-	-	-	-	-	-	1
DESULFATIRHABDIUM	1	-	-	-	-	-	-	-	-	-	1
DESULFITIBACTER	1	-	-	-	-	-	-	-	-	-	1
DESULFITOBACTERIUM	1	-	-	1	-	-	-	-	1	-	1
DESULFOARCULUS	1	-	-	-	-	-	-	-	-	-	1
DESULFOBACCA	1	-	-	1	-	-	-	-	-	-	1
DESULFOBACTER	1	-	-	1	-	-	-	-	1	-	1
DESULFOBACTERIUM	1	-	-	1	-	-	-	-	1	-	1
DESULFOBACULA	1	-	-	1	-	-	-	-	-	-	1
DESULFOBULBUS	1	-	-	1	-	-	-	-	1	-	1
DESULFOCAPSA	1	-	-	1	-	-	-	-	1	-	1
DESULFOCELLA	1	-	-	1	-	-	-	-	-	-	1
DESULFOCOCCUS	1	-	-	1	-	-	-	-	1	-	1
DESULFOFABA	1	-	-	1	-	-	-	-	-	-	1
DESULFOFRIGUS	1	-	-	1	-	-	-	-	-	-	1
DESULFOFUSTIS	1	-	-	1	-	-	-	-	1	-	1
DESULFOGLAEBA	1	-	-	-	-	-	-	-	-	-	1
DESULFOHALOBIUM	1	-	-	1	-	-	-	-	1	-	1
DESULFOLUNA	1	-	-	-	-	-	-	-	-	-	1
DESULFOMICROBIUM ORALE	2	-	-	2	-	-	-	-	-	-	2
DESULFOMONAS	1	-	-	-	-	-	-	-	1	-	1
DESULFOMONILE	1	-	-	1	-	-	-	-	1	-	1
DESULFOMUSA	1	-	-	-	-	-	-	-	-	-	1
DESULFONATRONAVIRGA	1	-	-	-	-	-	-	-	-	-	1
DESULFONATRONOSPIRA	1	-	-		-	-	-	-	-	-	1
DESULFONATRONOVIBRIO	1	-	-	1	-	-	-	-	1	-	1
DESULFONATRONUM	1	-	-	1	-	-	-	-	-	-	1
DESULFONAUTICUS	1	-	-	1	-	-	-	-	-	-	1

DESULFONEMA	**1**	-	-	1	-	-	-	-	1	-	**1**
DESULFONISPORA	**1**	-	-	1	-	-	-	-	-	-	**1**
DESULFOPILA	**1**	-	-	-	-	-	-	-	-	-	**1**
DESULFOREGULA	**1**	-	-	1	-	-	-	-	-	-	**1**
DESULFORHABDUS	**1**	-	-	1	-	-	-	-	1	-	**1**
DESULFORHOPALUS	**1**	-	-	1	-	-	-	-	-	-	**1**
DESULFOSARCINA	**1**	-	-	1	-	-	-	-	1	-	**1**
DESULFOSPIRA	**1**	-	-	1	-	-	-	-	1	-	**1**
DESULFOSPOROSINUS	**1**	-	-	1	-	-	-	-	1	-	**1**
DESULFOTALEA	**1**	-	-	1	-	-	-	-	-	-	**1**
DESULFOTHERMUS	**1**	-	-	-	-	-	-	-	-	-	**1**
DESULFOTIGNUM	**1**	-	-	1	-	-	-	-	-	-	**1**
DESULFOTOMACULUM	**1**	-	-	1	-	-	-	-	1	-	**1**
DESULFOVERMICULUS	**1**	-	-	-	-	-	-	-	-	-	**1**
DESULFOVIBRIO	**1**	-	-	1	-	-	-	-	1	-	**1**
DESULFOVIRGA	**1**	-	-	1	-	-	-	-	-	-	**1**
DESULFOVIRGULA	**1**	-	-	-	-	-	-	-	-	-	**1**
DESULFURELLA	**1**	-	-	1	-	-	-	-	1	-	**1**
DESULFURISPORA	**1**	-	-	-	-	-	-	-	-	-	**1**
DESULFURIVIBRIO	**1**	-	-	-	-	-	-	-	-	-	**1**
DESULFUROBACTERIUM	**1**	-	-	1	-	-	-	-	-	-	**1**
DESULFUROMONAS	**1**	-	-	1	-	-	-	-	1	-	**1**
DESULFUROMUSA	**1**	-	-	1	-	-	-	-	1	-	**1**
DETHIOBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
DETHIOSULFATIBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
DETHIOSULFOVIBRIO	**1**	-	-	1	-	-	-	-	1	-	**1**
DEVOSIA	**1**	-	-	1	-	-	-	-	1	-	**1**
DIALISTER INVISUS	**2**	-	-	2	-	-	-	-	-	-	**2**
DIALISTER PNEUMOSINTES	**2**	2	-	2	-	-	-	-	2	-	**2**

DIAPHOROBACTER	**1**	-	-	1	-	-	-	-	-	-	**1**
DICHELOBACTER NODOSUS	**1**	2	-	2	-	2	-	-	2	-	**1**
DICHOTOMICROBIUM	**1**	-	-	1	-	-	-	-	1	-	**1**
DICKEYA	**1**	-	-	-	-	-	-	-	-	-	**1**
DICTYOGLOMUS	**1**	-	-	1	-	-	-	-	1	-	**1**
DIETZIA CINNAMEA	**2**	-	-	-	-	-	-	-	1	-	**1**
DINOROSEOBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
DIPLOCOCCUS	**1**	-	-	-	-	-	-	-	-	-	**1**
DOKDOA	**1**	-	-	-	-	-	-	-	-	-	**1**
DOKDONELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
DOKDONIA	**1**	-	-	-	-	-	-	-	-	-	**1**
DOLOSICOCCUS	**1**	-	-	-	-	-	-	-	1	-	**1**
DOLOSIGRANULUM PIGRUM	**-**	-	-	2	-	-	-	-	2	-	**2**
DONGHAEANA	**1**	-	-	-	-	-	-	-	-	-	**1**
DOREA	**1**	-	-	1	-	-	-	-	-	-	**1**
DUGANELLA	**1**	-	-	1	-	-	-	-	1	-	**1**
DYADOBACTER	**1**	-	-	1	-	-	-	-	-	-	**1**
DYELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
EBERTHELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
ECHINICOLA	**1**	-	-	-	-	-	-	-	-	-	**1**
ECTOTHIORHODOSINUS	**1**	-	-	-	-	-	-	-	-	-	**1**
ECTOTHIORHODOSPIRA	**1**	-	-	1	-	-	-	-	1	-	**1**
EDAPHOBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
EDWARDSIELLA ANGUILLIMORTIFERA	**-**	2	-	-	-	2	-	-	2	-	**2**
EDWARDSIELLA ICTALURI	**2**	2	-	2	-	2 3	-	-	2	-	**1**
EDWARDSIELLA TARDA	**2**	2	2	2	2	2 3	2	2	2	2	**2**
EFFLUVIIBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
EGGERTHELLA HONGKONGENSIS	**2**	-	-	-	-	-	-	-	-	-	**2**

EGGERTHELLA LENTA	**2**	2	1	2	-	-	-	-	-	-	**2**
EGGERTHELLA SINENSIS	**2**	-	-	-	-	-	-	-	-	-	**2**
EHRLICHIA CANIS	**-**	2	-	2	-	2	2	2	2	2	**2**
EHRLICHIA CHAFFEENSIS	**-**	2	-	2	-	2	2	2	2	2	**2**
EHRLICHIA EQUI	**-**	2	-	2	-	2	2	2	2	2	**2**
EHRLICHIA EWINGII	**-**	2	-	2	-	2	2	2	2	2	**2**
EHRLICHIA PHAGOCYTOPHILA	**-**	2	-	2	-	2	2	2	2	2	**2**
EHRLICHIA RISTICI	**-**	2	-	2	-	2	2	2	2	2	**2**
EHRLICHIA SENNETSU	**-**	2	-	2	2	2	2	2	2	3	**2**
EIKENELLA CORRODENS	**2**	2	2	2	2	2	2	2	2	2	**2**
ELIORAEA	**1**	-	-	-	-	-	-	-	-	-	**1**
ELIZABETHKINGIA MENINGOSEPTICA	**2**	2	2	-	-	-	2	-	-	-	**2**
ELYTROSPORANGIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
EMPEDOBACTER BREVIS	**2**	2	-	2	-	-	-	-	2	-	**2**
EMTICICIA	**1**	-	-	-	-	-	-	-	-	-	**1**
ENHYGROMYXA	**1**	-	-	1	-	-	-	-	-	-	**1**
ENSIFER	**1**	-	-	1	-	-	-	-	1	-	**1**
ENTEROBACTER AEROGENES	**2**	2	1 2	2	2	2	2	2	2	2	**2**
ENTEROBACTER AMNIGENUS	**2**	2	1	2	2	2	2	2	2	2	**2**
ENTEROBACTER ASBURIAE	**2**	2	-	2	2	2	2	2	2	2	**2**
ENTEROBACTER CANCEROGENUS	**2**	-	-	2	2	2	2	2	2	2	**2**
ENTEROBACTER CLOACAE	**2**	2	1	2	2	2	2	2	2	2	**2**
ENTEROBACTER COWANII	**2**	-	-	2	2	2	2	2	-	2	**2**
ENTEROBACTER GERGOVIAE	**2**	2	-	2	2	2	2	2	2	2	**2**
ENTEROBACTER HORMAECHEI	**2**	2	-	2	2	2	2	2	2	2	**2**
ENTEROBACTER KOBEI	**2**	-	-	2	2	2	2	2	-	2	**2**
ENTEROBACTER SAKAZAKII	**-**	2	-	2	2	2	2	2	2	2	**2**
ENTEROBACTER TAYLORAE	**-**	2	-	-	2	2	2	2	-	2	**2**
ENTEROCOCCUS AVIUM	**2**	2	1	2	2	2	2	2	2	2	**2**

ENTEROCOCCUS COLUMBAE	-	2	-	1	2	2	2	2	1	2	1
ENTEROCOCCUS DISPAR	2	2	-	2	2	2	2	2	2	2	2
ENTEROCOCCUS DURANS	2	2	1	2	2	2	2	2	2	2	2
ENTEROCOCCUS FAECALIS	2	2	2	2	2	2	2	2	2	2	2
ENTEROCOCCUS FAECIUM	2	2	2	2	2	2	2	2	2	2	2
ENTEROCOCCUS FLAVESCENS	-	2	-	2	2	2	2	2	2	2	2
ENTEROCOCCUS GALLINARUM	2	2	1	2	2	2	2	2	2	2	2
ENTEROCOCCUS HIRAE	2	2	1	2	2	2	2	2	2	2	2
ENTEROCOCCUS PSEUDOAVIUM	2	2	-	2	2	2	2	2	2	2	2
ENTEROCOCCUS RAFFINOSUS	-	2	1	2	2	2	2	2	2	2	2
ENTEROCOCCUS SERIOLICIDA	2	-	-	2	2	2	2	-	2	-	2
ENTEROCOCCUS RATTI	2	-	-	2	2	2	2	2	-	2	2
ENTEROCOCCUS SOLITARIUS	2	-	2	2	2	2	2	2	2	-	2
ENTEROCOCCUS VILLORUM	2	-	-	2	2	2	2	2	-	2	2
ENTEROVIBRIO	1	-	-	1	-	-	-	-	-	-	1
EPERYTHROZOON COCCOIDES	-	-	-	2	-	-	-	-	2	-	2
EPERYTHROZOON OVIS	-	-	-	-	-	-	-	-	2	-	2
EPERYTHROZOON PARVUM	-	2	-	2	-	OP	-	-	2	-	2
EPERYTHROZOON SUIS	-	-	-	-	-	-	-	-	2	-	2
EPERYTHROZOON WENYONII	-	-	-	-	-	-	-	2	-		2
EPILITHONIMONAS	1	-	-	-	-	OP	-	-	-	-	1
EREMOCOCCUS	1	-	-	1	-	-	-	-	-	-	1
ERWINIA AMYLOVORA	1	-	-	1	-	-	-	-	2	-	1
ERWINIA CHRYSANTHEMI	-	-	-	-	-	-	-	-	2	-	2
ERWINIA HERBICOLA	-	2	-	-	-	-	-	-	-	-	2
ERYSIPELOTHRIX RHUSIOPATHIAE	-	2	2	2	2	2	2	2	2	2	2
ERYSIPELOTHRIX TONSILLARUM	2	-	1	-	-	-	-	1	-	-	1
ERYTHROBACTER	1	-	-	1	-	-	-	-	1	-	1
ERYTHROMICROBIUM RICHIA FERGUSONII	1	-	-	1	-	-	-	-	1	-	1

ERYTHROMONAS	**1**	-	-	-	-	-	-	-	1	-	**1**
ESCHERICHIA ALBERTII	**2**	-	-	2	-	-	-	-	-	-	**2**
ESCHERICHIA COLI	**2**	2	1 2	1 2 3	2 3	2 3	2 3	2	2 3	2 3	**2**
ESCHERICHIA FERGUSONII	**2**	2	-	2	-	-	-	-	2	-	**2**
ESCHERICHIA HERMANNII	**2**	2	-	2	-	-	-	-	2	-	**2**
ESCHERICHIA VULNERIS	**2**	2	-	2	-	-	-	-	2	-	**2**
ETHANOLIGENENS	**1**	-	-	-	-	-	-	-	-	-	**1**
EUBACTERIUM AEROFACIENS	**-**	-	-	-	-	-	-	-	2	-	**2**
EUBACTERIUM BRACHY	**2**	2	-	2	-	-	-	-	2	-	**2**
EUBACTERIUM COMBESII	**2**	2	-	2	-	-	-	-	2	-	**2**
EUBACTERIUM CONTORTUM	**2**	2	-	2	-	-	-	-	2	-	**2**
EUBACTERIUM INFIRMUM	**-**	-	-	2	-	-	-	-	2	-	**2**
EUBACTERIUM LIMOSUM	**2**	2	-	2	-	-	-	-	2	-	**2**
EUBACTERIUM MINUTUM	**2**	-	-	2	-	-	-	-	2	-	**2**
EUBACTERIUM MONILIFORME	**2**	2	-	2	-	-	-	-	2	-	**2**
EUBACTERIUM NITRITOGENES	**2**	2	-	2	-	-	-	-	2	-	**2**
EUBACTERIUM NODATUM	**2**	2	-	2	-	-	-	-	2	-	**2**
EUBACTERIUM SAPHENUM	**-**	2	-	2	-	-	-	-	2	-	**2**
EUBACTERIUM SULCI	**-**	2	-	2	-	-	-	-	2	-	**2**
EUBACTERIUM TARANTELLAE	**2**	2	-	2	-	2	-	-	2	-	**2**
EUBACTERIUM TENUE	**2**	2	-	2	-	-	-	-	2	-	**2**
EUBACTERIUM TORTUOSUM	**2**	2	-	2	-	-	-	-	2	-	**2**
EUBACTERIUM VENTRIOSUM	**2**	2	-	2	-	-	-	-	2	-	**2**
EUBACTERIUM YURII	**-**	2	-	2	-	-	-	-	-	-	**2**
EUDORAEA	**1**	-	-	-	-	-	-	-	-	-	**1**
EWINGELLA AMERICANA	**2**	2	-	2	-	-	-	-	2	-	**2**
EXCELLOSPORA	**1**	-	-	-	-	-	-	-	1	-	**1**
EXIGUOBACTERIUM AURANTIACUM	**1**	-	2	1	-	-	-	-	1	-	**2**

FACKLAMIA HOMINIS	-	-	-	-	-	-	-	-	2	-	2
FAECALIBACTERIUM PRAUSNITZII	2	2	-	2	-	-	-	-	-	-	2
FAENIA	1	-	-	-	-	-	-	-	-	-	1
FALCIVIBRIO GRANDIS	1	2	-	2	-	-	-	-	2	-	2
FALCIVIBRIO VAGINALIS	1	2	-	2	-	-	-	-	2	-	2
FASTIDIOSIPILA	1	-	-	-	-	-	-	-	-	-	1
FERRIBACTER	1	-	-	-	-	-	-	-	-	-	1
FERRIMONAS	1	-	-	1	-	-	-	-	1	-	1
FERROBACILLUS	1	-	-	-	-	-	-	-	-	-	1
FERROPLASMA	1	-	-	1	-	-	-	-	-	-	1
FERVIDOBACTERIUM	1	-	-	1	-	-	-	-	1	-	1
FILIBACTER	1	-	-	1	-	-	-	-	1	-	1
FILIFACTOR ALOCIS	1	2	-	2	-	-	-	-	1	-	2
FILOBACILLUS	1	-	-	-	-	-	-	-	-	-	1
FILOMICROBIUM	1	-	-	1	-	-	-	-	1	-	1
FINEGOLDIA MAGNA	2	2	1	2	-	-	-	-	-	-	2
FLAMMEOVIRGA	1	-	-	1	-	-	-	-	1	-	1
FLAVIMONAS ORYZIHABITANS	2	2	-	-	-	-	-	-	-	-	2
FLAVIRAMULUS	1	-	-	-	-	-	-	-	-	-	1
FLAVISOLIBACTER	1	-	-	-	-	-	-	-	-	-	1
FLAVOBACTERIUM BRANCHIOPHILUM	-	2	-	2	-	-	-	-	2	-	2
FLAVOBACTERIUM COLUMNARE	2	2	-	2	-	-	-	-	2	-	2
FLAVOBACTERIUM HYDATIS	2	2	-	2	-	-	-	-	2	-	2
FLAVOBACTERIUM JOHNSONAE	2	-	-	2	-	-	-	-	2	-	2
FLACOBACTERIUM MENINGOSEPTICUM	-	-	-	-	2	-	-	2	2	2	2
FLAVOBACTERIUM MIZUTAII	-	-	-	2	-	-	-	-	-	-	2
FLAVOBACTERIUM PSYCHROPHILA	2	2	-	2	-	-	-	-	2	-	2
FLAVOBACTERIUM YABUUCHIAE	-	2	-	-	-	-	-	-	2	-	2
FLECTOBACILLUS	1	-	-	1	-	-	-	-	1	-	1

FLEXIBACTER COLUMNARIS	1	2	-	1	-	2	-	-	-	-	1
FLEXIBACTER MARITIMUS	1	2	-	1	-	2	-	-	2	-	1
FLEXIBACTER OVOLYTICUS	1	2	-	1	-	2	-	-	2	-	1
FLEXIBACTER PSYCHROPHILUS	1	2	-	1	-	2	-	-	-	-	1
FLEXISTIPES	1	-	-	1	-	-	-	-	-	-	1
FLEXITHRIX	1	-	-	1	-	-	-	-	1	-	1
FLUORIBACTER BOZEMANAE	2	2	2	2	2	2	-	2	2	2	2
FLUORIBACTER DUMOFFII	2	2	-	2	-	-	-	-	2	-	2
FLUORIBACTER GORMANII	2	2	-	2	-	-	-	-	2	-	2
FLUVIICOLA	1	-	-	-	-	-	-	-	-	-	1
FODINICOLA	1	-	-	-	-	-	-	-	-	-	1
FORMIVIBRIO	1	-	-	1	-	-	-	-	1	-	1
FORMOSA	1	-	-	1	-	-	-	-	-	-	1
FRANCISELLA NOVICIDA	-	2	-	2	-	-	-	-	2	-	2
FRANCISELLA PHILOMIRAGIA	2	-	2	-	2	-	-	2	-		2
FRANCISELLA PISCICIDA	2	-	-	-	-	-	-	-	-	-	2
FRANCISELLA TULARENSIS	-	3	-	3	2 3	2 3	2 3	2 3	3	2 3	3
FRANKIA	1	-	-	1	-	-	-	-	1	-	1
FRATEURIA	1	-	-	1	-	-	-	-	1	-	1
FRIEDMANNIELLA	1	-	-	1	-	-	-	-	1	-	1
FRIGORIBACTERIUM	1	-	-	1	-	-	-	-	-	-	1
FRONDICOLA	1	-	-	-	-	-	-	-	-	-	1
FRONDIHABITANS	1	-	-	-	-	-	-	-	-	-	1
FRUCTOBACILLUS	1	-	-	-	-	-	-	-	-	-	1
FULVIMARINA	1	-	-	1	-	-	-	-	-	-	1
FULVIMONAS	1	-	-	1	-	-	-	-	-	-	1
FUNDIBACTER	1	-	-	1	-	-	-	-	-	-	1
FUSIBACTER	1	-	-	1	-	-	-	-	-	-	1
FUSOBACTERIUM ALOCIS	-	-	-	-	-	-	-	-	2	2	2

FUSOBACTERIUM CANIFELINUM	**2**	-	-	-	-	-	-	-	-	2	**2**
FUSOBACTERIUM EQUINUM	**2**	-	-	2	-	-	-	-	-	2	**2**
FUSOBACTERIUM GONIDIAFORMANS	**2**	2	-	2	-	-	-	-	2	2	**2**
FUSOBACTERIUM MORTIFERUM	**2**	2	-	2	-	-	-	-	2	2	**2**
FUSOBACTERIUM NAVIFORME	**2**	2	-	2	-	-	-	-	2	2	**2**
FUSOBACTERIUM NECROGENES	**-**	2	-	2	-	-	-	-	2	2	**2**
FUSOBACTERIUM NECROPHORUM	**2**	2	2	2	2	2	2	2	2	2	**2**
FUSOBACTERIUM NUCLEATUM	**2**	2	1	2	-	-	-	-	2	2	**1**
FUSOBACTERIUM PERIODONTICUM	**-**	2	-	2	-	-	-	-	2	2	**2**
FUSOBACTERIUM PRAUSNITZII	**-**	-	-	-	-	-	-	-	2	2	**2**
FUSOBACTERIUM RUSSII	**-**	2	-	2	-	-	-	-	2	2	**2**
FUSOBACTERIUM ULCERANS	**2**	2	-	2	-	-	-	-	2	2	**2**
FUSOBACTERIUM VARIUM	**2**	2	1	2	-	-	-	-	2	2	**1**
GAETBULIBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
GAETBULIMICROBIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
GAFFKYA	**1**	-	-	-	-	-	-	-	-	-	**1**
GALLIBACTERIUM ANATIS	**1**	-	-	2	-	-	-	-	-	-	**1**
GALLICOLA	**1**	-	-	1	-	-	-	-	-	-	**1**
GARCIELLA	**1**	-	-	1	-	-	-	-	-	-	**1**
GARDNERELLA VAGINALIS	**2**	2	2	2	2	2	2	2	2	2	**2**
GARIAELLA	**1**	-	-	-	-	-	-	-	1	-	**1**
GELIDIBACTER	**1**	-	-	1	-	-	-	-	-	-	**1**
GEMELLA BERGERI	**-**	-	-	2	-	-	-	-	2	-	**2**
GEMELLA CUNICULI	**2**	-	-	2	-	-	-	-	-	-	**2**
GEMELLA HAEMOLYSANS	**-**	2	-	2	-	-	-	-	2	-	**2**
GEMELLA MORBILORUM	**2**	2	2	2	-	-	-	-	2	-	**2**
GEMELLA SANGUINIS	**-**	-	-	2	-	-	-	-	2	-	**2**
GEMINICOCCUS	**1**	-	-	-	-	-	-	-	-	-	**1**

GEMMATA	1	-	-	1	-	-	-	-	1	-	1
GEMMATIMONAS	1	-	-	1	-	-	-	-	-	-	1
GEMMOBACTER	1	-	-	1	-	-	-	-	-	-	1
GEOALKALIBACTER	1	-	-	-	-	-	-	-	-	-	1
GEOBACILLUS	1	-	1	1	-	-	-	-	-	-	1
GEOBACTER	1	-	-	1	-	-	-	-	1	-	1
GEODERMATOPHILUS	1	-	-	1	-	-	-	-	1	-	1
GEOPSYCHROBACTER	1	-	-	-	-	-	-	-	-	-	1
GEORGENIA	1	-	-	1	-	-	-	-	-	-	1
GEOSINUS	1	-	-	-	-	-	-	-	-	-	1
GEOSPIRILLUM	1	-	-	-	-	-	-	-	-	-	1
GEOSPOROBACTER	1	-	-	-	-	-	-	-	-	-	1
GEOTHERMOBACTER	1	-	-	-	-	-	-	-	-	-	1
GEOTHRIX	1	-	-	1	-	-	-	-	-	-	1
GEOTRICHUM CANDIDUM	-	-	1	-	-	-	-	-	-	-	1
GEOTRICHUM CAPITATUM	-	-	1	-	-	-	-	-	-	-	1
GEOVIBRIO	1	-	-	1	-	-	-	-	-	-	1
GIESBERGERIA	1	-	-	-	-	-	-	-	-	-	1
GILLISIA	1	-	-	1	-	-	-	-	-	-	1
GLACIECOLA	1	-	-	1	-	-	-	-	-	-	1
GLACIIBACTER	1	-	-	-	-	-	-	-	-	-	1
GLOBICATELLA SANGUINIS	2	-	-	2	-	-	-	-	2	-	2
GLOBICATELLA SULFIDIFACIENS	2	-	-	2	-	-	-	-	-	-	2
GLUCONACETOBACTER	1	-	-	1	-	-	-	-	-	-	1
GLUCONOACETOBACTER	1	-	-	-	-	-	-	-	-	-	1
GLUCONOBACTER	1	-	-	1	-	-	-	-	1	-	1
GLYCOMYCES	1	-	-	1	-	-	-	-	1	-	1
GOODFELLOWIA	1	-	-	-	-	-	-	-	-	-	1
GOODFELLOWIELLA	1	-	-	-	-	-	-	-	-	-	1

GORDONA AICHIENSIS	**2**	-	-	2	-	-	-	-	2	-	**2**
GORDONA BRONCHIALIS	**2**	2	-	2	-	-	-	-	2	-	**2**
GORDONA EFFUSA	**2**	-	-	-	-	-	-	-	-	-	**2**
GORDONA KURUMENSIS	**2**	-	-	-	-	-	-	-	-	-	**2**
GORDONA MINIMA	**2**	-	-	-	-	-	-	-	-	-	**2**
GORDONA OTITIDIS	**2**	-	-	-	-	-	-	-	-	-	**2**
GORDONA SPUTI	**2**	2	-	2	-	-	-	-	2	-	**2**
GORDONA WRIGHTPATTERSONENSIS	**2**	-	-	-	-	-	-	-	-	-	**2**
GRACILIBACILLUS	**1**	-	-	1	-	-	-	-	-	-	**1**
GRACILIBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
GRAHAMELLA PEROMYSCI	**-**	2	-	-	-	-	-	-	-	-	**2**
GRAHAMELLA TALPAE	**-**	2	-	-	-	-	-	-	-	-	**2**
GRAMELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
GRANULIBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
GRANULICATELLA ADIACENS	**2**	2	-	2	-	-	-	-	-	-	**2**
GRANULICATELLA ELEGANS	**2**	-	-	2	-	-	-	-	-	-	**2**
GRANULICOCCUS	**1**	-	-	-	-	-	-	-	-	-	**1**
GRANULOBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
GRIMONTIA HOLLISAE	**2**	2	-	2	-	-	-	-	-	-	**2**
GUGGENHEIMELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
GULBENKIANIA	**1**	-	-	-	-	-	-	-	-	-	**1**
GULOSIBACTER	**1**	-	-	1	-	-	-	-	-	-	**1**
HAEMOBARTONELLA CANIS	**-**	-	-	2	-	2	-	-	2	-	**2**
HAEMOBARTONELLA FELIS	**-**	-	-	-	-	-	-	-	2	-	**2**
HAEMOBARTONELLA MURIS	**-**	-	-	-	-	-	-	-	2	-	**2**
HAEMOPHILUS AEGYPTIUS	**2**	2	-	2	2	2	2	2	2	2	**2**
HAEMOPHILUS DUCREYI	**2**	2	-	2	2	2	2	2	2	2	**2**
HAEMOPHILUS FELIS	**2**	-	-	2	2	2	2	2	2	2	**2**

HAEMOPHILUS HAEMOGLOBINOPHILUS	-	2	-	2	2	2	2	2	2	2	2
HAEMOPHILUS HAEMOLYTICUS	-	-	2	1	2	2	2	2	1	2	2
HAEMOPHILUS INFLUENZAE	2	2	2	2	2	2	2	2	2	2	2
HAEMOPHILUS PARACUNICULUS	2	2	-	2	2	2	2	2	2	2	2
HAEMOPHILUS PARAHAEMOLYTICUS	2	2	2	2	2	2	2	2	2	2	2
HAEMOPHILUS PARAINFLUENZAE	2	2	2	2	2	2	2	2	2	2	2
HAEMOPHILUS PARAPHROPHYLUS	-	2	2	2	2	2	2	2	2	2	2
HAEMOPHILUS PARAPHROHAEMOLYTICUS	2	2	-	2	2	2	2	2	2	2	2
HAEMOPHILUS PARASUIS	2	2	-	2	2	2	2	2	2	2	2
HAEMOPHILUS PISCIUM	-	2	-	2	2	2	2	2	2	2	2
HAEMOPHILUS PITTMANAIE	2	-	-	-	2	2	2	2	-	2	2
HAEMOPHILUS SOMNUS	-	-	2	-	2	2	2	2	-	2	2
HAFNIA ALVEI	2	2	1	2	-	OP	-	-	2	-	2
HAHELLA SEREGENS	1	2	-	-	-	-	-	-	2	-	1
HALALKALIBACILLUS	1	-	-	-	-	-	-	-	-	-	1
HALANAEROBACTER	1	-	-	1	-	-	-	-	-	-	1
HALANAEROBIUM	1	-	-	1	-	-	-	-	-	-	1
HALIANGIUM	1	-	-	1	-	-	-	-	-	-	1
HALIEA	1	-	-	-	-	-	-	-	-	-	1
HALISCOMENOBACTER	1	-	-	1	-	-	-	-	1	-	1
HALLELLA SEREGENS	-	-	-	-	-	-	-	-	2	-	2
HALOACTINOMYCES	1	-	-	-	-	-	-	-	-	-	1
HALOACTINOSPORA	1	-	-	-	-	-	-	-	-	-	1
HALOANAEROBACTER	1	-	-	-	-	-	-	-	1	-	1
HALOANAEROBIUM	1	-	-	-	-	-	-	-	1	-	1
HALOBACILLUS	1	-	-	1	-	-	-	-	1	-	1
HALOBACTEROIDES	1	-	-	1	-	-	-	-	1	-	1
HALOCELLA	1	-	-	-	-	-	-	-	1	-	1
HALOCHROMATIUM	1	-	-	1	-	-	-	-	-	-	1

HALOCOCCUS	1	-	-	1	-	-	-	-	1	-	1
HALOINCOLA	1	-	-	-	-	-	-	-	-	-	1
HALOLACTIBACILLUS	1	-	-	-	-	-	-	-	-	-	1
HALOMONAS	1	-	-	1	-	-	-	-	-	-	1
HALONATRONUM	1	-	-	1	-	-	-	-	-	-	1
HALORHODOSPIRA	1	-	-	1	-	-	-	-	1	-	1
HALOSPINA	1	-	-	-	-	-	-	-	-	-	1
HALOTHERMOTHRIX	1	-	-	1	-	-	-	-	1	-	1
HALOTHIOBACILLUS	-	-	1	-	-	-	-	-	-		1
HALOVIBRIO	1	-	-	-	-	-	-	-	-	-	1
HAMADAEA	1	-	-	-	-	-	-	-	-	-	1
HELCOCOCCUS KUNZII	2	-	2	-	-	-	-	2	-		2
HELCOCOCCUS OVIS	-	-	-	-	-	-	-	-	2	-	2
HELICOBACTER ACINOMYX	-	2	-	-	-	-	-	-	2	-	2
HELICOBACTER CANIS	2	2	-	2	-	-	-	-	2	-	2
HELICOBACTER CINAEDI	2	2	-	2	-	-	-	-	-	-	2
HELICOBACTER FENNELLIAE	-	2	-	2	-	-	-	-	2	-	2
HELICOBACTER HEPATICUS	-	2	-	2	-	2	-	-	2	-	2
HELICOBACTER MUSTELAE	-	2	-	2	-		-	-	2	-	2
HELICOBACTER PULLORUM	2	-	-	-	-	-	-	-	2	-	2
HELICOBACTER PYLORI	2	-	2	2	2	2	2	2	2		2
HELICOBACTER SUIS	2	-	-	-	-	-	-	-	-	-	2
HELIOBACILLUS	1	-	-	1	-	-	-	-	-	-	1
HELIOBACTERIUM	1	-	-	1	-	-	-	-	1	-	1
HELIOPHILUM	1	-	-	1	-	-	-	-	1	-	1
HELIORESTIS	1	-	-	1	-	-	-	-		-	1
HELLEA	1	-	-	-	-	-	-	-	-	-	1
HERBASPIRILLUM	1	-	-	1	-	-	-	-	1	-	1
HERBIDOSPORA	1	-	-	1	-	-	-	-	1	-	1

HERMINIIMONAS	1	-	-	-	-	-	-	-	-	-	1
HERPETOSIPHON	1	-	-	1	-	-	-	-	1	-	1
HESPELLIA	1	-	-	1	-	-	-	-	-	-	1
HIPPEA	1	-	-	1	-	-	-	-	-	-	1
HIRSCHIA	1	-	-	1	-	-	-	-	1	-	1
HOEFLEA	1	-	-	-	-	-	-	-	-	-	1
HOLDEMANIA	1	-	-	1	-	-	-	-	1	-	1
HOLOPHAGA	1	-	-	1	-	-	-	-	1	-	1
HONGIA	1	-	-	-	-	-	-	-	-	-	1
HONGIELLA	1	-	-	1	-	-	-	-	-	-	1
HORDEOMYCES	1	-	-	-	-	-	-	-	-	-	1
HOWARDELLA	1	-	-	-	-	-	-	-	-	-	1
HUMIBACILLUS	1	-	-	-	-	-	-	-	-	-	1
HUMIBACTER	1	-	-	-	-	-	-	-	-	-	1
HYALANGIUM	1	-	-	-	-	-	-	-	-	-	1
HYDROCARBONIPHAGA	-	-	1	-	-	-	-	-	-		1
HYDROGENIVIRGA	1	-	-	-	-	-	-	-	-	-	1
HYDROGENOBACTER	1	-	-	1	-	-	-	-	1	-	1
HYDROGENOBACULUM	-	-	1	-	-	-	-	-	-		1
HYDROGENOMONAS	1	-	-	-	-	-	-	-	-	-	1
HYDROGENOPHAGA	1	-	-	1	-	-	-	-	1	-	1
HYDROGENOPHILUS	1	-	-	1	-	-	-	-	-	-	1
HYDROGENOTHERMOPHILUS	1	-	-	1	-	-	-	-	-	-	1
HYDROGENOTHERMUS	1	-	-	1	-	-	-	-	-	-	1
HYDROGENOVIBRIO	1	-	-	1	-	-	-	-	1	-	1
HYLEMONELLA	1	-	-	1	-	-	-	-	-	-	1
HYMENOBACTER	1	-	-	1	-	-	-	-	-	-	1
HYPHOMICROBIUM	1	-	-	1	-	-	-	-	1	-	1
HYPHOMONAS	1	-	-	1	-	-	-	-	1	-	1

IDIOMARINA	1	-	-	1	-	-	-	-	-	-	1
IGNATZSCHINERIA	1	-	-	-	-	-	-	-	-	-	1
IGNAVIGRANUM RUOFFIAE	2	-	-	2	-	-	-	-	-	-	2
ILYOBACTER	1	-	-	1	-	-	-	-	1	-	1
INFLABILIS	1	-	-	-	-	-	-	-	-	-	1
INQUILINUS	1	-	-	1	-	-	-	-	-	-	1
INSOLITISPIRILLUM	1	-	-	-	-	-	-	-	-	-	1
INTRASPORANGIUM	1	-	-	1	-	-	-	-	1	-	1
IODOBACTER	1	-	-	1	-	-	-	-	1	-	1
ISOBACULUM	1	-	-	1	-	-	-	-	-	-	1
ISOCHROMATIUM	1	-	-	1	-	-	-	-	-	-	1
ISOPTERICOLA	1	-	-	1	-	-	-	-	-	-	1
ISSATCHENKIA ORIENTALIS	-	-	2	-	-	-	-	-	-	-	2
JAHNELLA	1	-	-	-	-	-	-	-	-	-	1
JAHNIA	1	-	-	-	-	-	-	-	-	-	1
JANIBACTER	1	-	-	1	-	-	-	-	1	-	1
JANNASCHIA	1	-	-	1		-	-	-	-	-	1
JANTHINOBACTERIUM	1	-	-	1	-	-	-	-	-	-	1
JEJUANA	1	-	-	-	-	-	-	-	-	-	1
JENSENIA	1	-	-	-	-	-	-	-	-	-	1
JEOTGALIBACILLUS	1	-	-	1	-	-	-	-	-	-	1
JEOTGALICOCCUS	1	-	-	1	-	-	-	-	-	-	1
JIANGELLA	1	-	-	-	-	-	-	-	-	-	1
JOHNSONELLA IGNAVA	-	2	-	2	-	-	-	-	2	-	2
JONESIA DENITRIFICANS	2	2	-	2	-	2	-	-	2	-	2
JOOSTELLA	1	-	-	-	-	-	-	-	-	-	1

KAISTIA	1	-	-	-	-	-	-	-	-	-	1
KAISTOBACTER	1	-	-	-	-	-	-	-	-	-	1
KANGIELLA	1	-	-	1	-	-	-	-	-	-	1
KERSTERSIA GYIORUM	2	-	-	2	-	-	-	-	-	-	2
KIBDELOSPORANGIUM	1	-	-	1	-	-	-	-	1	-	1
KILONIELLA	1	-	-	-	-	-	-	-	-	-	1
KINEOCOCCUS	1	-	-	1	-	-	-	-	1	-	1
KINEOSPHAERA	1	-	-	1	-	-	-	-	-	-	1
KINEOSPORIA	1	-	-	1	-	-	-	-	1	-	1
KINGELLA DENITRIFICANS	2	2	2	2	-	OP	-	-	2	-	2
KINGELLA KINGAE	2	2	-	2	-	OP	-	-	2	-	2
KINGELLA ORALIS	2	2	-	2	-	OP	-	-	2	-	2
KINGELLA POTUS	2	-	-	-	-	OP	-	-	-	-	2
KITASATOA	1	-	-	-	-	-	-	-	1	-	1
KITASATOSPORA	1	-	-	1	-	-	-	-	1	-	1
KITASATOSPORIA	1	-	-	-	-	-	-	-	-	-	1
KLEBSIELLA GRANULOMATIS	-	-	-	2	2	2	2	2	2	2	2
KLEBSIELLA MOBILIS	-	-	-	2	2	2	2	2	2	2	2
KLEBSIELLA OXYTOCA	2	2	2	2	2	2	2	2	2	2	2
KLEBSIELLA PNEUMONIAE	2	2	2	2	2	2	2	2	2	2	2
KLEBSIELLA VARIICOLA	2	-	-	2	2	2	2	2	-	2	2
KLOECKERA APICULATA	-	-	1	-	-	-	-	-	-	-	1
KLUGIELLA ASCORBATA	1	-	-	-	-	-	-	-	-	-	1
KLUYVERA ASCORBATA	-	2	-	2	-	-	-	-	2	-	2
KLUYVERA CRYOCRESCENS	2	2	-	2	-	-	-	-	2	-	2
KLUYVERA INTERMEDIA	2	2	-	-	-	-	-	-	-	-	2
KNOELLIA	1	-	-	1	-	-	-	-	-	-	1
KOCURIA	1	-	1	1	-	-	-	-	1	-	1
KOFLERIA	1	-	-	-	-	-	-	-	-	-	1

KORDIIMONAS	1	-	-	-	-	-	-	-	-	-	1
KOSERELLA TARBULSII	1	2	-	2	-	-	-	-	2	-	1
KOZAKIA	1	-	-	1	-	-	-	-	-	-	1
KRASILNIKOVIA	1	-	-	-	-	-	-	-	-	-	1
KRIBBELLA	1	-	-	1	-	-	-	-	-	-	1
KRIBBIA	1	-	-	-	-	-	-	-	-	-	1
KRIEGELLA	1	-	-	-	-	-	-	-	-	-	1
KTEDOBACTER	1	-	-	-	-	-	-	-	-	-	1
KTEDONOBACTER	1	-	-	-	-	-	-	-	-	-	1
KURTHIA	1	-	-	1	-	-	-	-	1	-	1
KUSHNERIA	1	-	-	-	-	-	-	-	-	-	1
KUTZNERIA	1	-	-	1	-	-	-	-	1	-	1
KYTOCOCCUS	1	-	-	1	-	-	-	-	1	-	1
LABEDELLA	1	-	-	-	-	-	-	-	-	-	1
LABRENZIA	1	-	-	-	-	-	-	-	-	-	1
LABRYS	1	-	-	1	-	-	-	-	1	-	1
LACEYELLA	1	-	-	-	-	-	-	-	-	-	1
LACHNOBACTERIUM	1	-	-	1	-	-	-	-	-	-	1
LACHNOSPIRA	1	-	-	1	-	-	-	-	1	-	1
LACTOBACILLUS CARNIS	1	2	1	-	-	-	-	-	-	-	1
LACTOBACILLUS CATENAFORMIS	1	2	1	2	-	-	-	-	2	-	1
LACTOBACILLUS CRISPATUS	1	2	1	1	-	-	-	-	1	-	1
LACTOBACILLUS GASSERI	1	2	1	1	-	-	-	-	1	-	1
LACTOBACILLUS PSITTACI	-	-	-	2	-	-	-	-	-	-	2
LACTOBACILLUS RHAMNOSUS	1	2	1	2	-	-	-	-	2	-	1
LACTOBACILLUS TRICHODES	1	2	1	-	-	-	-	-	1	-	1
LACTOBACILLUS ULI	-	-	-	-	-	-	-	-	2	-	2
LACTOBACTERIUM	1	-	-	-	-	-	-	-	-	-	1

LACTOCOCCUS CATENAFORMIS	**2**	-	-	-	-	-	-	-	-	-	**2**
LACTOCOCCUS GARVIAE	**-**	2	-	2	-	-	-	-	2	-	**2**
LACTOCOCCUS LACTIS	**-**	2	-	1	-	-	-	-	1	-	**1**
LACTOCOCCUS PSITTACI	**2**	-	-	-	-	-	-	-	-	-	**2**
LACTOCOCCUS RHAMNOSUS	**2**	-	1	-	-	-	-	-	-	-	**1**
LACTONIFACTOR	**1**	-	-	-	-	-	-	-	-	-	**1**
LACTOSPHAERA	**1**	-	-	-	-	-	-	-	1	-	**1**
LACTOVUM	**1**	-	-	-	-	-	-	-	-	-	**1**
LAMPROCYSTIS	**1**	-	-	1	-	-	-	-	1	-	**1**
LAMPROPEDIA	**1**	-	-	1	-	-	-	-	1	-	**1**
LAPILLICOCCUS	**1**	-	-	-	-	-	-	-	-	-	**1**
LARIBACTER	**1**	-	-	1	-	-	-	-	-	-	**1**
LAUTROPIA	**1**	-	-	1	-	-	-	-	1	-	**1**
LAWSONIA INTRACELLULARIS	**-**	-	-	2	-	-	-	-	2	-	**2**
LEADBETTERELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
LEBETIMONAS	**1**	-	-	-	-	-	-	-	-	-	**1**
LECHEVALIERIA	**1**	-	-	1	-	-	-	-	-	-	**1**
LECLERCIA ADECARBOXYLATA	**2**	2	1	2	-	-	-	-	2	-	**2**
LEEIA	**1**	-	-	-	-	-	-	-	-	-	**1**
LEEUWENHOEKIELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
LEGIONELLA ANISA	**2**	2	-	2	2	2	2	2	2	2	**2**
LEGIONELLA BIRMINGHAMENSIS	**2**	2	-	2	2	2	2	2	2	2	**2**
LEGIONELLA CINCINNATIENSIS	**2**	2	-	2	2	2	2	2	2	2	**2**
LEGIONELLA FEELEII	**2**	2	-	2	2	2	2	2	2	2	**2**
LEGIONELLA HACKELIAE	**2**	2	-	2	2	2	2	2	2	2	**2**
LEGIONELLA IMPLETISOLI	**2**	-	-	-	2	2	2	2	-	2	**2**
LEGIONELLA JORDANIS	**2**	2	-	2	2	2	2	2	2	2	**2**
LEGIONELLA LANSINGENSIS IANTHELENSI	**2**	2	-	2	2	2	2	2	2	2	**2**
LEGIONELLA LONGBEACHAE	**2**	2	-	2	2	2	2	2	2	2	**2**

LEGIONELLA OAKRIDGENSIS	**2**	2	-	2	2	2	2	2	2	2	**2**
LEGIONELLA PITSBURGHENSIS	**-**	2	-	-	2	2	2	2	-	2	**2**
LEGIONELLA PNEUMOPHILA	**2**	2	2	2	2	2	2	2	2	2	**2**
LEGIONELLA SIANTHELENSI	**2**	2	-	2	2	2	2	2	2	2	**2**
LEGIONELLA TUCSONENSIS	**2**	2	-	2	2	2	2	2	2	2	**2**
LEGIONELLA WADSWORTHII	**2**	2	-	2	2	2	2	2	2	2	**2**
LEGIONELLA YABUUCHIAE	**2**	-	-	-	2	2	2	2	-	2	**2**
LEIFSONIA SP.	**2**	-	-	1	-	-	-	-	-	-	**2**
LEISINGERA	**1**	-	-	1	-	-	-	-	-	-	**1**
LEMINORELLA	**1**	-	-	1	-	-	-	-	1	-	**1**
LENTIBACILLUS	**1**	-	-	1	-	-	-	-	-	-	**1**
LENTZEA	**1**	-	-	1	-	-	-	-	1	-	**1**
LEPTOLINEA	**1**	-	-	1	-	-	-	-	-	-	**1**
LEPTONEMA	**1**	-	-	1	-	-	-	-	1	-	**1**
LEPTOSPIRA ALEXANDERI	**-**	-	-	-	-	-	-	-	2	-	**2**
LEPTOSPIRA BORGPETERSENII	**2**	2	-	2	-	-	-	-	2	-	**2**
LEPTOSPIRA INADAI	**-**	2	-	2	-	-	-	-	2	-	**2**
LEPTOSPIRA GENOMOSPECIES 4	**2**	-	-	-	-	-	-	-	-	-	**2**
LEPTOSPIRA GENOMOSPECIES 5	**2**	-	-	-	-	-	-	-	-	-	**2**
LEPTOSPIRA INTERROGANS	**2**	2	-	2	2	2 3	2	2	2	2	**2**
LEPTOSPIRA KIRSCHNERI	**2**	2	-	2	-	-	-	-	2	-	**2**
LEPTOSPIRA NOGUCHII	**2**	2	-	2	-	-	-	-	2	-	**2**
LEPTOSPIRA SANTAROSAI	**2**	2	-	2	-	-	-	-	2	-	**2**
LEPTOSPIRA WEILII	**-**	2	-	2	-	-	-	-	2	-	**2**
LEPTOSPIRILLUM	**1**	-	-	1	-	-	-	-	-	-	**1**
LEPTOTHRIX	**1**	-	-	1	-	-	-	-	1	-	**1**
LEPTOTRICHIA AMNIONII	**2**	-	-	-	-	-	-	-	1	-	**2**
LEUCOBACTER	**1**	-	-	1	-	-	-	-	1	-	**1**
LEUCONOSTOC	**1**	-	-	1	-	-	-	-	1	-	**1**

LEUCOTHRIX	1	-	-	1	-	-	-	-	1	-	1
LEVILINEA	1	-	-	-	-	-	-	-	-	-	1
LEVINEA MALONATICA	1	2	-	-	-	-	-	-	2	-	1
LIMNOBACTER	1	-	-	1	-	-	-	-	-	-	1
LISTERIA INNOCUA	-	2	-	1	-	-	-	-	1	-	2
LISTERIA IVANOVII	2	2	2	2	2	2	2	2	2	2	2
LISTERIA MONOCYTOGENES	2	2	2	2	2	2	2	2	2	2	2
LISTONELLA ANGUILLARUM	2	2	-	2	-	2	-	-	2	-	2
LOKTANELLA	1	-	-	1	-	-	-	-	-	-	1
LONEPINELLA	1	-	-	1	-	-	-	-	1	-	1
LONGISPORA	1	-	-	1	-	-	-	-	-	-	1
LOPHOMONAS	1	-	-	-	-	-	-	-	-	-	1
LUCIBACTERIUM	1	-	-	-	-	-	-	-	-	-	1
LUEDEMANNELLA	1	-	-	-	-	-	-	-	-	-	1
LUTEIBACTER	1	-	-	-	-	-	-	-	-	-	1
LUTEIMONAS	1	-	-	1	-	-	-	-	-	-	1
LUTEOCOCCUS	1	-	-	1	-	-	-	-	1	-	1
LUTISPORA	1	-	-	-	-	-	-	-	-	-	1
LYSINIBACILLUS	1	-	-	-	-	-	-	-	-	-	1
LYSOBACTER	1	-	-	1	-	-	-	-	1	-	1
MACROCOCCUS CASEOLYTICUS	2	-	2	2	-	-	-	-	-	-	2
MACROMONAS	1	-	-	1	-	-	-	-	1	-	1
MAGNETOSPIRILLUM	1	-	-	1	-	-	-	-	1	-	1
MAHELLA	1	-	-	-	-	-	-	-	-	-	1
MALIKIA	1	-	-	-	-	-	-	-	-	-	1
MALONOMONAS	1	-	-	1	-	-	-	-	1	-	1
MANJUSHARMELLA	1	-	-	-	-	-	-	-	-	-	1
MANNHEIMIA GLUCOSIDA	-	-	-	-	-	-	-	-	2	-	2

MANNHEIMIA GRANULOMATIS	**2**	2	-	2	-	-	-	-	2	-	**2**
MANNHEIMIA HAEMOLYTICA	**2**	2	2	2	-	-	-	-	2	-	**2**
MANNHEIMIA RUMINALIS	**-**	-	-	-	-	-	-	-	2	-	**2**
MANNHEIMIA VARIGENA	**2**	-	-	2	-	-	-	-	2	-	**2**
MARIBACTER	**1**		-	1	-	-	-	-	-	-	**1**
MARICAULIS	**1**	-	-	-	-	-	-	-	-	-	**1**
MARICHROMATIUM	**1**	-	-	1	-	-	-	-	-	-	**1**
MARIHABITANS	**1**	-	-	-	-	-	-	-	-	-	**1**
MARINIBACILLUS	**1**	-	-	1	-	-	-	-	-	-	**1**
MARINIFLEXILE	**1**	-	-	-	-	-	-	-	-	-	**1**
MARINILABILIA	**1**	-	-	1	-	-	-	-	1	-	**1**
MARINILACTIBACILLUS	**1**	-	-	1	-	-	-	-	-	-	**1**
MARINIMICROBIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
MARINITHERMUS	**1**	-	-	1	-	-	-	-	-	-	**1**
MARINITOGA	**1**	-	-	1	-	-	-	-	-	-	**1**
MARINOBACTER	**1**	-	-	1	-	-	-	-	1	-	**1**
MARINOBACTERIUM	**1**	-	-	1	-	-	-	-	1	-	**1**
MARINOCOCCUS	**1**	-	-	1	-	-	-	-	1	-	**1**
MARINOMONAS	**1**	-	-	1	-	-	-	-	1	-	**1**
MARINOSPIRILLUM	**1**	-	-	1	-	-	-	-	-	-	**1**
MARINOVUM	**1**	-	-	-	-	-	-	-	-	-	**1**
MARMORICOLA	**1**	-	-	1	-	-	-	-	-	-	**1**
MARTELELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
MARVINBRYANTIA	**1**	-	-	-	-	-	-	-	-	-	**1**
MASSILIA	**1**	-	-	1	-	-	-	-	-	-	**1**
MECHERCHARIMYCES	**1**	-	-	-	-	-	-	-	-	-	**1**
MECHERCHAROMYCES	**1**	-	-	-	-	-	-	-	-	-	**1**
MEGAMONAS	**1**	-	-	1	-	-	-	-	1	-	**1**
MEGANEMA	**1**	-	-	-	-	-	-	-	-	-	**1**

MEGASPHAERA ELSDENII	**2**	2	-	2	-	-	-	-	2	-	**2**
MEIOTHERMUS	**1**	-	-	1	-	-	-	-	1	-	**1**
MELISSOCOCCUS PLUTONIUS	**-**	2	-	-	-	3	-	-	2	-	**2**
MELITEA	**1**	-	-	-	-	-	-	-	-	-	**1**
MELITTANGIUM	**1**	-	-	-	-	-	-	-	1	-	**1**
MESOFLAVIBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
MESONIA	**1**	-	-	1	-	-	-	-	-	-	**1**
MESOPHILOBACTER	**1**	-	-	1	-	-	-	-	1	-	**1**
MESORHIZOBIUM	**1**	-	-	1	-	-	-	-	1	-	**1**
METASCARDOVIA	**1**	-	-	-	-	-	-	-	-	-	**1**
METHANOMONAS	**1**	-	-	-	-	-	-	-	-	-	**1**
METHYLIBIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
METHYLOBACILLUS	**1**	-	-	1	-	-	-	-	1	-	**1**
METHYLOBACTER	**1**	-	-	1	-	-	-	-	-	-	**1**
METHYLOBACTERIUM	**1**	-	1	1	-	-	-	-	1	-	**1**
METHYLOCAPSA	**1**	-	-	1	-	-	-	-	-	-	**1**
METHYLOCELLA	**1**	-	-	1	-	-	-	-	-	-	**1**
METHYLOCYSTIS	**1**	-	-	1	-	-	-	-	1	-	**1**
METHYLOHALOBIUS	**1**	-	-	-	-	-	-	-	-	-	**1**
METHYLOHALOMONAS	**1**	-	-	-	-	-	-	-	-	-	**1**
METHYLOMICROBIUM	**1**	-	-	1	-	-	-	-	1	-	**1**
METHYLOMONAS	**1**	-	-	1	-	-	-	-	1	-	**1**
METHYLONATRUM	**1**	-	-	-	-	-	-	-	-	-	**1**
METHYLOPHAGA	**1**	-	-	1	-	-	-	-	1	-	**1**
METHYLOPHILA	**1**	-	-	1	-	-	-	-	-	-	**1**
METHYLOPHILUS	**1**	-	-	1	-	-	-	-	1	-	**1**
METHYLOPILA	**1**	-	-	1	-	-	-	-	-	-	**1**
METHYLOSARCINA	**1**	-	-	1	-	-	-	-	-	-	**1**
METHYLOSINUS	**1**	-	-	1	-	-	-	-	1	-	**1**

METHYLOTENERA	**1**	-	-	-	-	-	-	-	-	-	**1**
METHYLOVORUS	**1**	-	-	1	-	-	-	-	1	-	**1**
MICROBACTERIUM RESISTENS	**2**	-	-	2	-	-	-	-	-	-	**2**
MICROBISPORA	**1**	-	-	1	-	-	-	-	1	-	**1**
MICROBULBIFER	**1**	-	-	1	-	-	-	-	1	-	**1**
MICROCELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
MICROCOCCINEAE	**1**	-	-	-	-	-	-	-	-	-	**1**
MICROCOCCUS	**1**	-	1	1	-	-	-	-	1	-	**1**
MICROCYCLUS	**1**	-	-	-	-	-	-	-	-	-	**1**
MICROECHINOSPORA	**1**	-	-	-	-	-	-	-	-	-	**1**
MICROELLOBOSPORIA	**1**	-	-	-	-	-	-	-	-	-	**1**
MICROLUNATUS	**1**	-	-	1	-	-	-	-	1	-	**1**
MICROMONAS MICROS	**1**	2	1	2	-	-	-	-	-	-	**2**
MICROMONOSPORA	**1**	-	-	1	-	-	-	-	1	-	**1**
MICROPOLYSPORA	**1**	-	-	1	-	-	-	-	1	-	**1**
MICROPRUINA	**1**	-	-	1	-	-	-	-	-	-	**1**
MICROSCILLA	**1**	-	-	1	-	-	-	-	1	-	**1**
MICROSPHAERA	**1**	-	-	-	-	-	-	-	1	-	**1**
MICROSTREPTOSPORA	**1**	-	-	-	-	-	-	-	-	-	**1**
MICROTERRICOLA MULTACIDA	**1**	-	-	-	-	-	-	-	-	-	**1**
MICROTETRASPORA	**1**	-	-	1	-	-	-	-	1	-	**1**
MICROVIRGA	**1**	-	-	1	-	-	-	-	-	-	**1**
MICROVIRGULA AERODENITRIFICANS	**1**	-	-	1	-	-	-	-	2	-	**1**
MILLISIA	**1**	-	-	-	-	-	-	-	-	-	**1**
MITSUOKELLA	**2**	2	-	2	-	-	-	-	2	-	**2**
MOBILUNCUS CURTISII	**2**	2	-	2	-	-	-	-	2	-	**2**
MOBILUNCUS MULIERIS	**2**	2	-	2	-	-	-	-	2	-	**2**
MODESTOBACTER	**1**	-	-	1	-	-	-	-	-	-	**1**
MOELLERELLA WISCONSENSIS	**2**	2	-	1	-	-	-	-	2	-	**1**

MOGIBACTERIUM NEGLECTUM	-	-	-	2	-	-	-	-	-	-	2
MOGIBACTERIUM PUMILUM	-	-	-	2	-	-	-	-	-	-	2
MOGIBACTERIUM TIMIDUM	2	2	-	2	-	-	-	-	-	-	2
MOGIBACTERIUM VESCUM	-	-	-	2	-	-	-	-	-	-	2
MOORELLA	1	-	-	1	-	-	-	-	2	-	1
MORAXELLA ATLANTAE	2	2	-	2	-	2	-	-	2	-	2
MORAXELLA CAPRAE	-	-	-	-	-	-	-	-	2	-	2
MORAXELLA CATARRHALIS	2	2	1	2	-	2	-	-	2	2	2
MORAXELLA EQUI	2	2	-	2	-	2	-	-	2	-	2
MORAXELLA LACUNATA	2	2	-	2	-	2	-	-	2	-	2
MORAXELLA NONLIQUEFACIENS	2	2	-	2	-	2	-	-	2	-	2
MORAXELLA OSLOENSIS	2	2	-	2	-	2	-	-	2	-	2
MORAXELLA OVIS	2	2	-	2	-	2	-	-	2	-	2
MORAXELLA SACCHAROLYTICA	-	2	-	2	-	2	-	-	2	-	2
MORGANELLA MORGANII	2	2	2	2	2	2	2	2	2	2	2
MORGANELLA PSYCHROTOLERANS	2	-	-	-	-	-	-	-	-	-	2
MORITELLA	1	-	-	1	-	-	-	-	1	-	1
MOROCOCCUS CEREBROSUS	-	2	-	2	-	-	-	-	2	-	2
MORYELLA INDOLIGENES	2	-	-	-	-	-	-	-	-	-	2
MUCILAGINIBACTER	1	-	-	-	-	-	-	-	-	-	1
MURICAUDA	1	-	-	1	-	-	-	-	-	-	1
MURICOCCUS	1	-	-	1	-	-	-	-	-	-	1
MYCELIGENERANS	1	-	-	1	-	-	-	-	-	-	1
MYCETOCOLA	1	-	-	1	-	-	-	-	-	-	1
MYCOBACTERIUM ABSCESSUS	-	2	-	2	-	-	-	-	2	-	2
MYCOBACTERIUM AFRICANUM	-	3	-	3	3	3	3	3	3	3	3
MYCOBACTERIUM AROSIENSE	2	-	-	-	-	-	-	-	-	-	2
MYCOBACTERIUM ARUPENSE	2	-	-	-	-	-	-	-	-	-	2
MYCOBACTERIUM ASIATICUM	2	2	-	2	-	-	-	-	2	-	2

MYCOBACTERIUM AUSTROAFRICANUM	-	-	-	-	-	-	-	-	2	-	2
MYCOBACTERIUM AVIUM	2	2	2	2	2	2 3	2	2	2	2	2
MYCOBACTERIUM BOENICKEI	2	-	-	2	-	-	-	-	-	-	2
MYCOBACTERIUM BOVIS	-	3	-	3	3	3	3	3	3	3	3
MYCOBACTERIUM BRANDERI	2	-	-	2	-	-	-	-	2	-	2
MYCOBACTERIUM BRISBANENSE	2	-	-	2	-	-	-	-	-	-	2
MYCOBACTERIUM CANARIASENSE	2	-	-	2	-	-	-	-	-	-	2
MYCOBACTERIUM CELATUM	2	2	-	2	-	-	-	-	2	-	2
MYCOBACTERIUM CHELONAE	2	2	-	2	2	2	2	2	2	2	2
MYCOBACTERIUM CHIMAERA	2	-	-	2	-	-	-	-	-	-	2
MYCOBACTERIUM COLOMBIENSE	2	-	-	-	-	-	-	-	-	-	2
MYCOBACTERIUM CONCEPTIONENSE	2	-	-	-	-	-	-	-	-	-	2
MYCOBACTERIUM CONCORDENSE	2	-	-	-	-	-	-	-	-	-	2
MYCOBACTERIUM CONSPICUUM	2	-	-	2	-	-	-	-	2	-	2
MYCOBACTERIUM COSMETICUM	2	-	-	-	-	-	-	-	-	-	2
MYCOBACTERIUM ELEPHANTIS	2	-	-	2	-	-	-	-	-	-	2
MYCOBACTERIUM FURTH	2	-	-	-	-	-	-	-	-	-	2
MYCOBACTERIUM FARCINOGENES	2	2	-	2	-	-	-	-	2	-	2
MYCOBACTERIUM FLAVESCENS	2	2	-	2	-	-	-	-	2	-	2
MYCOBACTERIUM FORTUITUM	2	2	2	2	2	2	2	2	2	2	2
MYCOBACTERIUM GASTRI	2	2	-	2	-	-	-	-	2	-	2
MYCOBACTERIUM GENAVENSE	-	2	-	2	-	-	-	-	2	-	2
MYCOBACTERIUM GOODII	2	-	-	2	-	-	-	-	-	-	2
MYCOBACTERIUM GORDONAE	-	-	2	1	-	-	-	-	1	-	2
MYCOBACTERIUM HACKENSACKENSE	2	-	-	-	-	-	-	-	-	-	2
MYCOBACTERIUM HAEMOPHILUM	2	2	-	2	-	OP	-	-	2	-	2
MYCOBACTERIUM HECKESHORNENSE	2	-	-	2	-	-	-	-	-	-	2
MYCOBACTERIUM HEIDELBERGENSE	2	-	-	2	-	-	-	-	2	-	2
MYCOBACTERIUM HOUSTONENSE	2	-	-	2	-	-	-	-	-	-	2

MYCOBACTERIUM IMMUNOGENUM	**2**	-	-	2	-	-	-	-	-	-	**2**
MYCOBACTERIUM INSUBRICUM	**2**	-	-	-	-	-	-	-	-	-	**2**
MYCOBACTERIUM INTERJECTUM	**2**	2	-	2	-	-	-	-	2	-	**2**
MYCOBACTERIUM INTERMEDIUM	**2**	2	-	2	-	-	-	-	2	-	**2**
MYCOBACTERIUM INTRACELLULARE	**2**	2	2	2	-	2	2	-	2	-	**2**
MYCOBACTERIUM KANSASII	**2**	2	2	2	2	2	2	2	2	2	**2**
MYCOBACTERIUM KUBICAE	**2**	-	-	2	-	-	-	-	-	-	**2**
MYCOBACTERIUM KUMAMOTONENSE	**2**	-	-	-	-	-	-	-	-	-	**2**
MYCOBACTERIUM LENTIFLAVUM	**2**	-	-	2	-	-	-	-	2	-	**2**
MYCOBACTERIUM LEPRAE	**-**	3	-	3	3	3	3	3	3	3	**3**
MYCOBACTERIUM LEPRAEMURIUM	**-**	2	-	2	-	3	-	-	2	-	**2**
MYCOBACTERIUM MALMOENSE	**2**	2	-	2	2	2	2	2	2	3	**2**
MYCOBACTERIUM MANITOBENSE	**2**	-	-	-	-	-	-	-	-	-	**2**
MYCOBACTERIUM MARINUM	**2**	2	-	2	2	2	2	2	2	2	**2**
MYCOBACTERIUM MASSILIENSE	**2**	-	-	-	-	-	-	-	-	-	**2**
MYCOBACTERIUM MICROTI	**-**	3	-	3	3	3	3	3	3	3	**3**
MYCOBACTERIUM MONACENSE	**2**	-	-	-	-	-	-	-	-	-	**2**
MYCOBACTERIUM MONTEFIORENSE	**2**	-	-	2	-	-	-	-	-	-	**2**
MYCOBACTERIUM MUCOGENICUM	**2**	-	-	2	-	-	-	-	2	-	**2**
MYCOBACTERIUM NEWORLEANSENSE	**2**	-	-	2	-	-	-	-	-	-	**2**
MYCOBACTERIUM NOVOCASTRENSE	**2**	-	-	2	-	-	-	-	2	-	**2**
MYCOBACTERIUM PALUSTRE	**2**	-	-	2	-	-	-	-	-	-	**2**
MYCOBACTERIUM PARASCROPHULACEUM	**2**	-	-	2	-	-	-	-	-	-	**2**
MYCOBACTERIUM PARASEOULENSE	**2**	-	-	-	-	-	-	-	-	-	**2**
MYCOBACTERIUM PARATUBERCULOSIS	**2**	2	-	-	2	-	-	2	-	2	**2**
MYCOBACTERIUM PEREGRINUM	**-**	-	2	1	-	-	-	-	1	-	**2**
MYCOBACTERIUM PHOCAICUM	**2**	-	-	-	-	-	-	-	-	-	**2**
MYCOBACTERIUM PORCINUM	**2**	2	-	2	-	-	-	-	2	-	**2**
MYCOBACTERIUM PSEUDOSHOTTSII	**2**	-	-	-	-	-	-	-	-	-	**2**

MYCOBACTERIUM RATISBONENSE	**2**	-	-	-	-	-	-	-	-	-	**2**
MYCOBACTERIUM SALMONIPHILUM	**2**	-	-	-	-	-	-	-	-	-	**2**
MYCOBACTERIUM SASKATCHEWANENSE	**2**	-	-	2	-	-	-	-	-	-	**2**
MYCOBACTERIUM SCROFULACEUM	**2**	2	-	2	2	2	2	2	2	2	**2**
MYCOBACTERIUM SENEGALENSE	**2**	2	-	2	-	-	-	-	2	-	**2**
MYCOBACTERIUM SENUENSE	**2**	-	-	-	-	-	-	-	-	-	**2**
MYCOBACTERIUM SEOULENSE	**2**	-	-	-	-	-	-	-	-	-	**2**
MYCOBACTERIUM SEPTICUM	**2**	-	-	2	-	-	-	-	-	-	**2**
MYCOBACTERIUM SETENSE	**2**	-	-	-	-	-	-	-	-	-	**2**
MYCOBACTERIUM SHIMOIDEI	**2**	2	-	2	-	2	-	-	2	-	**2**
MYCOBACTERIUM SHOTTSII	**2**	-	-	2	-	-	-	-	-	-	**2**
MYCOBACTERIUM SIMIAE	**2**	2	-	2	2	2	2	2	2	2	**2**
MYCOBACTERIUM SMEGMATIS	**2**	-	1	2	-	-	-	-	1	-	**2**
MYCOBACTERIUM SZULGAI	**2**	2	-	2	2	2	2	2	2	3	**2**
MYCOBACTERIUM TOGOLENSE	**2**	-	-	-	-	-	-	-	-	-	**2**
MYCOBACTERIUM TRIPLEX	**2**	-	-	2	-	-	-	-	2	-	**2**
MYCOBACTERIUM TUBERCULOSIS	**-**	3	2	3	3	3	3	3	3	3	**3**
MYCOBACTERIUM ULCERANS	**-**	3	-	3	3	3	3	3	3	3	**3**
MYCOBACTERIUM VACCAE	**2**	2	-	2	-	-	-	-	2	-	**2**
MYCOBACTERIUM WOLINSKYI	**2**	-	-	2	-	-	-	-	2	-	**2**
MYCOBACTERIUM XENOPI	**2**	2	-	2	2	2	2	2	2	2	**2**
MYCOPLANA	**1**	-	-	1	-	-	-	-	1	-	**1**
MYCOPLASMA ADLERI	**2**	2	-	2	-	-	-	-	2	-	**2**
MYCOPLASMA AGALACTIAE	**-**	2	-	2	-	3	-	-	2	-	**2**
MYCOPLASMA ALKALESCENS	**-**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA ANATIS	**-**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA ARGININI	**2**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA ARTHRITIDIS	**2**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA BOVIGENITALIUM	**-**	2	-	2	-	2	-	-	2	-	**2**

MYCOPLASMA BOVIRHINIS	**2**	-	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA BOVIS	**-**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA BOVOCULI	**2**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA BUTEONIS	**-**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA CALIFORNICUM	**2**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA CANADENSE	**-**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA CANIS	**-**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA CAPRICOLUM	**-**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA CAVIAE	**-**	2	-	2	2	2	2	-	2	2	**2**
MYCOPLASMA CLOACALE	**-**	2	-	-	-	2	-	-	1	-	**1**
MYCOPLASMA COCCOIDES	**-**	2	-	-	-	2	-	-	-	-	**2**
MYCOPLASMA COLLIS	**-**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA COLUMBINASALE	**-**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA CONJUNCTIVAE	**-**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA COROGYPSI	**-**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA CYNOS	**-**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA DISPAR	**2**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA EDWARDII	**-**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA EQUIGENITALIUM	**-**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA EQUIRHINIS	**-**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA FALCONIS	**-**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA FELIS	**-**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA FERMENTANS	**2**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA FLOCCULARE	**-**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA GALLINARUM	**2**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA GALLISEPTICUM	**2**	2	-	2	-	3	-	-	2	-	**1**
MYCOPLASMA GALLOPAVORIS	**-**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA GATEAE	**-**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA GENITALIUM	**2**	2	-	2	-	2	-	-	2	-	**2**

MYCOPLASMA GLYCOPHILUM	-	2	-	2	-	2	-	-	2	-	2
MYCOPLASMA GYPSIS	-	2	-	2	-	2	-	-	2	-	2
MYCOPLASMA HAEMOCANIS	-	2	-	-	-	2	-	-	-	-	2
MYCOPLASMA HAEMOFELIS	-	2	-	2	-	2	-	-	-	-	2
MYCOPLASMA HAEMOMURIS	-	2	-	2	-	2	-	-	-	-	2
MYCOPLASMA HOMINIS	2	2	2	2	2	2	2	-	2	2	2
MYCOPLASMA HYOPNEUMONIAE	-	2	-	2	-	3	-	-	2	-	1
MYCOPLASMA HYORHINIS	2	2	-	2	-	2	-	-	2	-	2
MYCOPLASMA HYOSYNOVIAE	-	2	-	2	-	2	-	-	2	-	2
MYCOPLASMA IMMITANS	-	2	-	2	-	2	-	-	2	-	2
MYCOPLASMA IOWAE	-	2	-	2	-	2	-	-	2	-	2
MYCOPLASMA LIPOFACIENS	-	2	-	2	-	2	-	-	2	-	2
MYCOPLASMA MACULOSUM	-	2	-	2	-	2	-	-	2	-	2
MYCOPLASMA MELEAGRIDIS	2	2	-	2	-	2	-	-	2	-	2
MYCOPLASMA MICROTI	2	-	-	2	-	2	-	-	-	-	2
MYCOPLASMA MYCOIDES	2	2	-	2	-	3 4	-	-	2 3	-	1
MYCOPLASMA NEUROLYTICUM	-	2	-	2	-	2	-	-	2	-	2
MYCOPLASMA ORALE	-	-	2	1	-	2	-	-	1	-	1
MYCOPLASMA OVIS	-	2	-	2	-	2	-	-	-	-	2
MYCOPLASMA PHOCACEREBRALE	-	2	-	2	-	2	-	-	2	-	2
MYCOPLASMA PHOCARHINIS	-	2	-	2	-	2	-	-	2	-	2
MYCOPLASMA PHOCIDAE	-	2	-	2	-	2	-	-	2	-	2
MYCOPLASMA PNEUMONIAE	-	2	2	2	2	2	2	2	2	2	2
MYCOPLASMA PULMONIS	2	2	-	2	-	2	-	-	2	-	2
MYCOPLASMA PUTREFACIENS	-	2	-	2	-	2	-	-	2	-	2
MYCOPLASMA SALIVARIUM	-	2	-	2	-	2	-	-	2	-	2
MYCOPLASMA SPUMANS	-	2	-	2	-	2	-	-	2	-	2
MYCOPLASMA STURNI	2	-	-	2	-	2	-	-	2	-	2
MYCOPLASMA SUIPNEUMONIAE	-	2	-	2	-	2	-	-	-	-	2

MYCOPLASMA SYNOVIAE A1645	**2**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA VERECUNDUM	**-**	2	-	2	-	2	-	-	2	-	**2**
MYCOPLASMA WENYONII	**-**	2	-	2	-	2	-	-	-	-	**2**
MYROIDES ODORATUS	**2**	2	1	2	-	-	-	-	2	-	**2**
MYXOCOCCUS	**1**	-	-	1	-	-	-	-	1	-	**1**
NAKAMURELLA	**1**	-	-	1	-	-	-	-	-	-	**1**
NANNOCYSTIS	**1**	-	-	1	-	-	-	-	1	-	**1**
NATRANAERO	**1**	-	-	-	-	-	-	-	-	-	**1**
NATRONIELLA	**1**	-	-	1	-	-	-	-	1	-	**1**
NATRONINCOLA	**1**	-	-	1	-	-	-	-	-	-	**1**
NAUTILIA	**1**	-	-	1	-	-	-	-	-	-	**1**
NAXIBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
NEISSERIA ELONGATA	**2**	2	-	2	-	2	-	-	2	-	**2**
NEISSERIA FLAVESCENS	**2**	2	-	2	-	2	-	-	2	-	**2**
NEISSERIA GONORRHOEAE	**2**	2	2	2	2	2	2	2	2	2	**2**
NEISSERIA IGUANAE	**-**	2	-	2	-	2	-	-	2	-	**2**
NEISSERIA LACTAMICA	**2**	2	2	2	-	2	-	-	2	-	**2**
NEISSERIA MENINGITIDIS	**2**	2	2	2	2	2	2	2	2	2	**2**
NEISSERIA MUCOSA	**2**	2	2	2	-	2	-	-	2	-	**2**
NEISSERIA SICCA	**2**	2	1	2	-	2	-	-	2	-	**1**
NEISSERIA SUBFLAVA	**2**	2	-	2	-	2	-	-	2	-	**2**
NEISSERIA WEAVERI	**2**	2	-	2	-	2	-	-	2	-	**2**
NEORICKETTSIA SENNETSU	**-**	-	-	-	-	-	2	-	2	-	**2**
NEPTUNOMONAS	**1**	-	-	1	-	-	-	-	-	-	**1**
NEREIDA	**1**	-	-	1	-	-	-	-	-	-	**1**
NESIOTOBACTER	**1**	-	-	1	-	-	-	-	-	-	**1**
NESTERENKONIA	**1**	-	-	1	-	-	-	-	1	-	**1**
NEVSKIA	**1**	-	-	1	-	-	-	-	1	-	**1**

NIABELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
NIASTELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
NICOLETELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
NISAEA	**1**	-	-	-	-	-	-	-	-	-	**1**
NITRATIFRACTOR	**1**	-	-	-	-	-	-	-	-	-	**1**
NITRATIREDUCTOR	**1**	-	-	1	-	-	-	-	-	-	**1**
NITRATIRUPTOR	**1**	-	-	-	-	-	-	-	-	-	**1**
NITRILIRUPTOR	**1**	-	-	-	-	-	-	-	-	-	**1**
NITRINCOLA	**1**	-	-	-	-	-	-	-	-	-	**1**
NITROBACTER	**1**	-	-	1	-	-	-	-	1	-	**1**
NOCARDIA ABSCESSUS	**2**	-	-	2	-	-	-	-	-	-	**2**
NOCARDIA AFRICANA	**2**	-	-	2	-	-	-	-	-	-	**2**
NOCARDIA ALTAMIRENSIS	**2**	-	-	-	-	-	-	-	-	-	**2**
NOCARDIA ARAOENSIS	**2**	-	-	-	-	-	-	-	-	-	**2**
NOCARDIA ARTHRITIDIS	**2**	-	-	-	-	-	-	-	-	-	**2**
NOCARDIA ASIATICA	**2**	-	-	2	-	-	-	-	-	-	**2**
NOCARDIA ASTEROIDES	**2**	2	-	2	2	2	2	2	2	2	**2**
NOCARDIA BLACKLOCKIAE	**2**	-	-	-	-	-	-	-	-	-	**2**
NOCARDIA BRASILIENSIS	**2**	2	2	2	-	2	2	2	2	2	**2**
NOCARDIA CONCAVA	**2**	-	-	-	-	-	-	-	-	-	**2**
NOCARDIA CYRIACIGEORGICA	**2**	-	-	2	-	-	-	-	-	-	**2**
NOCARDIA ELEGANS	**2**	-	-	-	-	-	-	-	-	-	**2**
NOCARDIA EXALBIDA	**2**	-	-	-	-	-	-	-	-	-	**2**
NOCARDIA FARCINICA	**2**	2	-	2	2	2	2	2	2	2	**2**
NOCARDIA HIGOENSIS	**2**	-	-	-	-	-	-	-	-	-	**2**
NOCARDIA IGNORATA	**2**	-	-	-	-	-	-	-	-	-	**2**
NOCARDIA KRUCZAKIAE	**2**	-	-	-	-	-	-	-	-	-	**2**
NOCARDIA MEXICANA	**2**	-	-	-	-	-	-	-	-	-	**2**
NOCARDIA NIIGATENSIS	**2**	-	-	2	-	-	-	-	-	-	**2**

NOCARDIA NINAE	**2**	-	-	-	-	-	-	-	-	-	**2**
NOCARDIA NOVA	**2**	2	-	2	2	2	2	2	2	2	**2**
NOCARDIA OTITIDISCAVIARUM	**2**	2	-	2	2	2	2	2	2	2	**2**
NOCARDIA PAUCIVORANS	**2**	-	-	2	-	-	-	-	-	-	**2**
NOCARDIA PNEUMONIAE	**2**	-	-	-	-	-	-	-	-	-	**2**
NOCARDIA PSEUDOBRASILIENSIS	**2**	-	-	2	-	-	-	-	2	-	**2**
NOCARDIA SALMONICIDA	**2**	-	-	2	-	-	-	-	2	-	**2**
NOCARDIA SERIOLAE	**2**	2	-	2	-	-	-	-	2	-	**2**
NOCARDIA TERPENICA	**2**	-	-	-	-	-	-	-	-	-	**2**
NOCARDIA TRANSVALENSIS	**2**	2	-	2	-	-	-	-	2	-	**2**
NOCARDIA TSUNAMIENSIS	**2**	-	-	-	-	-	-	-	-	-	**2**
NOCARDIA VETERANA	**2**	-	-	2	-	-	-	-	-	-	**2**
NOCARDIA WALLACEI	**2**	-	-	-	-	-	-	-	-	-	**2**
NOCARDIA YAMANASHIENSIS	**2**	-	-	2	-	-	-	-	-	-	**2**
NOCARDIOIDES	**1**	-	-	1	-	-	-	-	1	-	**1**
NOCARDIOPSIS DASSONVILLEI	**2**	2	-	2	-	-	-	-	2	-	**2**
NOCARDIOPSIS IGNORATA	**2**	-	-	-	-	-	-	-	-	-	**2**
NONOMURAEA	**1**	-	-	1	-	-	-	-	-	-	**1**
NONOMURIA	**1**	-	-	-	-	-	-	-	-	-	**1**
NOVISPIRILLUM	**1**	-	-	-	-	-	-	-	-	-	**1**
NOVOSPHINGOBIUM	**1**	-	1	1	-	-	-	-	-	-	**1**
OBESUMBACTERIUM	**1**	-	-	1	-	-	-	-	-	-	**1**
OCEANIBULBUS	**1**	-	-	1	-	-	-	-	-	-	**1**
OCEANICAULIS	**1**	-	-	1	-	-	-	-	-	-	**1**
OCEANICOLA	**1**	-	-	1	-	-	-	-	-	-	**1**
OCEANIMONAS	**1**	-	-	1	-	-	-	-	-	-	**1**
OCEANISERPENTILLA	**1**	-	-	-	-	-	-	-	-	-	**1**
OCEANISPHAERA	**1**	-	-	1	-	-	-	-	-	-	**1**

OCEANITHERMUS	1	-	-	1	-	-	-	-	-	-	1
OCEANOBACILLUS	1	-	-	1	-	-	-	-	-	-	1
OCEANOBACTER	1	-	-	1	-	-	-	-	-	-	1
OCEANOMONAS	1	-	-	-	-	-	-	-	-	-	1
OCEANOSPIRILLUM	1	-	-	1	-	-	-	-	1	-	1
OCHROBACTRUM ANTHROPI	2	2	1 2	2	-	-	-	-	2	-	2
OCHROBACTRUM INTERMEDIUM	2	-	-	2	-	-	-	-	-	-	2
OCTADECABACTER	1	-	-	1	-	-	-	-	-	-	1
ODONTOMYCES	1	-	-	-	-	-	-	-	-	-	1
ODORIBACTER SPLANCHNICUS	2	-	-	-	-	-	-	-	-	-	2
OENOCOCCUS	1	-	-	1	-	-	-	-	1	-	1
OERSKOVIA	1	-	-	1	-	-	-	-	1	-	1
OKIBACTERIUM	1	-	-	1	-	-	-	-	-	-	1
OLEIPHILUS	1	-	-	1	-	-	-	-	-	-	1
OLEISPIRA	1	-	-	1	-	-	-	-	-	-	1
OLIGELLA UREOLYTICA	-	2	-	1	-	-	-	-	1	-	1
OLIGELLA URETHRALIS	-	-	2	1	-	-	-	-	1	-	1
OLIGOTROPHA	1	-	-	1	-	-	-	-	1	-	1
OLIVIBACTER	1	-	-	-	-	-	-	-	-	-	1
OLSENELLA PROFUSA	2	-	-	2	-	-	-	-	-	-	2
OLSENELLA ULI	2	2	-	2	-	-	-	-	-	-	2
OPITUTUS	1	-	-	1	-	-	-	-	-	-	1
ORENIA	1	-	-	1	-	-	-	-	1	-	1
ORIBACTERIUM	1	-	-	1	-	-	-	-	-	-	1
ORIENTIA TSUTSUGAMUSHI	-	3	-	3	-	3	3	3	3	-	3
ORNITHINIBACILLUS	1	-	-	-	-	-	-	-	-	-	1
ORNITHINICOCCUS	1	-	-	-	-	-	-	-	-	-	1
ORNITHINIMICROBIUM	1	-	-	1	-	-	-	-	-	-	1
ORNITHOBACTERIUM RHINOTRACHEALE	2	2	-	2	-	-	-	-	2	-	2

ORYZIHUMUS	1	-	-	-	-	-	-	-	-	-	1
OSCILLIBACTER	1	-	-	-	-	-	-	-	-	-	1
OTTOWIA	1	-	-	1	-	-	-	-	-	-	1
OWENWEEKSIA	1	-	-	-	-	-	-	-	-	-	1
OXALICIBACTERIUM	1	-	-	1	-	-	-	-	-	-	1
OXALOBACTER	1	-	-	1	-	-	-	-	1	-	1
OXALOPHAGUS	1	-	-	1	-	-	-	-	1	-	1
OXOBACTER	1	-	-	1	-	-	-	-	1	-	1
PAENIBACILLUS LARVAE	1	-	-	1	-	3	-	-	2	-	1
PAENIBACILLUS LENTIMORBUS	-	2	-	1	-	-	-	-	-	-	1
PAENIBACILLUS POPILIAE	-	2	-	1	-	-	-	-	2	-	1
PALUDIBACTER	1	-	-	-	-	-	-	-	-	-	1
PALUDIBACTERIUM	1	-	-	-	-	-	-	-	-	-	1
PANDORAEA APISTA	2	-	-	2	-	-	-	-	-	-	2
PANDORAEA PNOMENUSA	2	-	-	2	-	-	-	-	-	-	2
PANDORAEA PULMONICOLA	2	-	-	2	-	-	-	-	-	-	2
PANDORAEA SPUTORUM	2	-	-	2	-	-	-	-	-	-	2
PANNONIBACTER	1	-	-	1	-	-	-	-	-	-	1
PANTOEA AGGLOMERANS	2	-	2	-	-	-	-	2	-		2
PANTOEA STEWARTII	-	-	-	-	-	-	-	-	2	-	2
PAPILLIBACTER	1	-	-	1	-	-	-	-	-	-	1
PARABACTEROIDES DISTASONIS	2	2	2	-	-	-	-	-	-	-	2
PARACOCCUS YEEII	1	-	-	2	-	-	-	-	-	-	1
PARACOLOBACTRUM	1	-	-	-	-	-	-	-	-	-	1
PARALACTOBACILLUS	1	-	-	1	-	-	-	-	-	-	1
PARALIOBACILLUS	1	-	-	1	-	-	-	-	-	-	1
PARAMORITELLA	1	-	-	-	-	-	-	-	-	-	1
PARASCARDOVIA	1	-	-	1	-	-	-	-	-	-	1

PARASPOROBACTERIUM	1	-	-	1	-	-	-	-	-	-	1
PARVIBACULUM	1	-	-	1	-	-	-	-	-	-	1
PARVIMONAS MICRA	2	-	-	-	-	-	-	-	-	-	2
PARVOPOLYSPORA	1	-	-	-	-	-	-	-	-	-	1
PASTEURELLA AEROGENES	-	2	2	1	2	2	2	2	1	2	2
PASTEURELLA BETTYAE	-	2	-	2	2	2	2	2	2	2	2
PASTEURELLA CABALLI	-	2	-	2	2	2	2	2	2	2	2
PASTEURELLA CANIS	-	2	-	2	2	2	2	2	2	2	2
PASTEURELLA DAGMATIS	-	2	-	2	2	2	2	2	2	2	2
PASTEURELLA HAEMOLYTICA	-	-	-	-	-	3	2	2	2	2	2
PASTEURELLA LYMPHANGITIDIS	-	2	-	2	2	2	2	2	2	2	2
PASTEURELLA MAIRII	2	2	-	2	2	2	2	2	2	2	2
PASTEURELLA MULTOCIDA	2	2	2	2	2	2 3	2	2	2	2	2
PASTEURELLA PNEUMOTROPICA	2	2	-	2	2	2	2	2	2	2	2
PASTEURELLA STOMATIS	-	2	-	2	2	2	2	2	2	2	2
PASTEURELLA TESTUDINIS	-	2	-	2	2	2	2	2	2	2	2
PASTEURELLA TREHALOSI	-	2	-	2	2	2	2	2	2	2	2
PASTEURIA NISHIZAWAE	1	2	-	1	-	2	-	-	1	-	1
PASTEURIA PENETRANS	1	2	-	1	-	2	-	-	1	-	1
PASTEURIA THRONEI	1	2	-	1	-	-	-	-	1	-	1
PATULIBACTER	1	-	-	-	-	-	-	-	-	-	1
PAUCIBACTER	1	-	-	-	-	-	-	-	-	-	1
PAUCIMONAS	1	-	-	1	-	-	-	-	-	-	1
PAUCISALIBACILLUS	1	-	-	-	-	-	-	-	-	-	1
PECTINATUS	1	-	-	1	-	-	-	-	1	-	1
PECTOBACTERIUM	1	-	-	1	-	-	-	-	-	-	1
PEDIOCOCCUS	1	-	1	1	-	-	-	-	1	-	1
PEDOBACTER	1	-	-	1	-	-	-	-	-	-	1
PELAGIBACILLUS	1	-	-	-	-	-	-	-	-	-	1

PELAGICOLA	1	-	-	-	-	-	-	-	-	-	1
PELCZARIA	1	-	-	1	-	-	-	-	1	-	1
PELOBACTER	1	-	-	1	-	-	-	-	1	-	1
PELODICTYON	1	-	-	1	-	-	-	-	1	-	1
PELOMONAS	1	-	-	-	-	-	-	-	-	-	1
PELOSINUS	1	-	-	-	-	-	-	-	-	-	1
PELOSPORA	1	-	-	1	-	-	-	-	-	-	1
PELOTOMACULUM	1	-	-	1	-	-	-	-	-	-	1
PEPTOCOCCUS NIGER	2	2	-	2	-	OP	-	-	2	-	2
PEPTONIPHILUS ASACCHAROLYTICUS	2	2	1 2	2	-	-	-	-	-	-	1
PEPTONIPHILUS GORBACHII	2	-	-	-	-	-	-	-	-	-	2
PEPTONIPHILUS HAREI	2	-	-	2	-	-	-	-	-	-	2
PEPTONIPHILUS INDOLICUS	2	2	-	2	-	-	-	-	-	-	2
PEPTONIPHILUS IVORII	2	-	-	2	-	-	-	-	-	-	2
PEPTONIPHILUS LACRIMALIS	2	2	-	2	-	-	-	-	-	-	2
PEPTONIPHILUS OLSENII	2	-	-	-	-	-	-	-	-	-	2
PEPTOSTREPTOCOCCUS ANAEROBIUS	-	2	2	1	2	2	2	2	2	2	2
PEPTOSTREPTOCOCCUS ASACCHAROLYTICUS	-	-	-	-	-	-	-	2	2		2
PEPTOSTREPTOCOCCUS HAREI	-	-	-	-	-	-	-	-	2	2	2
PEPTOSTREPTOCOCCUS INDOLICUS	-	-	-	-	-	-	-	-	2	2	2
PEPTOSTREPTOCOCCUS IVORII	-	-	-	-	-	-	-	-	2	2	2
PEPTOSTREPTOCOCCUS LACRIMALIS	-	-	-	-	-	-	-	-	2	2	2
PEPTOSTREPTOCOCCUS MAGNUS	-	-	-	-	-	-	-	-	2	2	2
PEPTOSTREPTOCOCCUS PREVOTII	-	-	-	-	-	-	-	-	2	2	2
PEPTOSTREPTOCOCCUS VAGINALIS	-	-	-	-	-	-	-	-	2	2	2
PEREDIBACTER	1	-	-	1	-	-	-	-	-	-	1
PERLUCIDIBACA	1	-	-	-	-	-	-	-	-	-	1
PERSEPHONELLA	1	-	-	1	-	-	-	-	-	-	1
PERSICIVIRGA	1	-	-	-	-	-	-	-	-	-	1

PERSICOBACTER	1	-	-	1	-	-	-	-	1	-	1
PETRIMONAS	1	-	-	-	-	-	-	-	-	-	1
PETROBACTER	1	-	-	1	-	-	-	-	-	-	1
PETROTOGA	1	-	-	1	-	-	-	-	1	-	1
PHAEOBACTER	1	-	-	-	-	-	-	-	-	-	1
PHAEOSPIRILLUM	1	-	-	1	-	-	-	-	-	-	1
PHASCOLARCTOBACTERIUM	1	-	-	1	-	-	-	-	1	-	1
PHENYLOBACTERIUM	1	-	-	1	-	-	-	-	1	-	1
PHOCOENOBACTER	1	-	-	1	-	-	-	-	-	-	1
PHOTOBACTERIUM DAMSELAE	1	2	-	2	-	2	-	-	2	-	2
PHOTORHABDUS ASYMBIOTICA	2	-	-	2	-	-	-	-	-	-	2
PHOTORHABDUS LUMINESCENS	-	2	-	1	-	-	-	-	1	-	1
PHYCICOCCUS	1	-	-	-	-	-	-	-	-	-	1
PHYCICOLA	1	-	-	-	-	-	-	-	-	-	1
PHYLLOBACTERIUM	1	-	-	1	-	-	-	-	1	-	1
PHYTOBACTER	1	-	-	-	-	-	-	-	-	-	1
PHYTOMONAS	1	-	-	-	-	-	-	-	-	-	1
PIGMENTIPHAGA	1	-	-	1	-	-	-	-	-	-	1
PILIMELIA	1	-	-	1	-	-	-	-	1	-	1
PIMELOBACTER	1	-	-	-	-	-	-	-	-	-	1
PIRELLA	1	-	-	-	-	-	-	-	-	-	1
PIRELLULA	1	-	-	1	-	-	-	-	1	-	1
PISCIBACILLUS	1	-	-	-	-	-	-	-	-	-	1
PISCIRICKETTSIA SALMONIS	-	-	-	-	-	2	-	-	2	-	2
PLANCTOMYCES	1	-	-	1	-	-	-	-	1	-	1
PLANIFILUM	1	-	-	-	-	-	-	-	-	-	1
PLANOBISPORA	1	-	-	1	-	-	-	-	1	-	1
PLANOCOCCUS	1	-	-	1	-	-	-	-	1	-	1
PLANOMICROBIUM	1	-	-	1	-	-	-	-	-	-	1

PLANOMONOSPORA	**1**	-	-	1	-	-	-	-	1	-	**1**
PLANOPOLYSPORA	**1**	-	-	-	-	-	-	-	-	-	**1**
PLANOSPORANGIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
PLANOTETRASPORA	**1**	-	-	1	-	-	-	-	1	-	**1**
PLANTIBACTER	**1**	-	-	1	-	-	-	-	-	-	**1**
PLEOMORPHOMONAS	**1**	-	-	-	-	-	-	-	-	-	**1**
PLESIOCYSTIS	**1**	-	-	1	-	-	-	-	-	-	**1**
PLESIOMONAS SHIGELLOIDES	**2**	2	2	2	2	2	2	2	2	2	**2**
PODANGIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
POLARIBACTER	**1**	-	-	1	-	-	-	-	-	-	**1**
POLAROMONAS	**1**	-	-	1	-	-	-	-	1	-	**1**
POLYANGIUM	**1**	-	-	1	-	-	-	-	1	-	**1**
POLYMORPHOSPORA	**1**	-	-	-	-	-	-	-	-	-	**1**
POLYNUCLEOBACTER NECESSARIUS	**-**	2	-	1	-	-	-	-	1	-	**1**
PONTIBACILLUS	**1**	-	-	-	-	-	-	-	-	-	**1**
PONTIBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
PONTICOCCUS	**1**	-	-	-	-	-	-	-	-	-	**1**
PORPHYROBACTER	**1**	-	-	1	-	-	-	-	1	-	**1**
PORPHYROMONAS ASACCHAROLYTICA	**2**	2	-	2	2	2	2	2	2	2	**2**
PORPHYROMONAS CANSULCI	**-**	2	-	2	2	2	2	2	2	2	**2**
PORPHYROMONAS CANGINGIVALIS	**-**	2	-	2	2	2	2	2	2	2	**2**
PORPHYROMONAS CANORIS	**-**	2	-	2	2	2	2	2	-	2	**2**
PORPHYROMONAS CIRCUMDENTARIA	**-**	2	-	2	2	2	2	2	2	2	**2**
PORPHYROMONAS CREVIORICANIS	**-**	2	-	2	2	2	2	2	2	2	**2**
PORPHYROMONAS ENDODONTALIS	**-**	2	-	2	2	2	2	2	2	2	**2**
PORPHYROMONAS GINGIVALIS	**2**	2	2	2	2	2	2	2	2	2	**2**
PORPHYROMONAS GULAE	**2**	-	-	2	2	2	2	2	-	2	**2**
PORPHYROMONAS LEVII	**-**	2	2	2	2	2	2	2	2	2	**2**
PORPHYROMONAS MACACAE	**2**	2	-	2	2	2	2	2	2	2	**2**

PRAGIA	1	-	-	1	-	-	-	-	1	-	1
PRAUSERELLA	1	-	-	1	-	-	-	-	-	-	1
PREVOTELLA ALBENSIS	2	-	-	2	2	2	2	2	2	2	2
PREVOTELLA BERGENSIS	2	-	-	-	2	2	2	2	-	2	2
PREVOTELLA BIVIA	2	2	-	2	2	2	2	2	2	2	2
PREVOTELLA BREVIS	-	2	-	2	2	2	2	2	2	2	2
PREVOTELLA BRYANTII	2	-	-	2	2	2	2	2	2	2	2
PREVOTELLA BUCCAE	2	2	-	2	2	2	2	2	2	2	2
PREVOTELLA BUCCALIS	2	2	-	2	2	2	2	2	2	2	2
PREVOTELLA CORPORIS	2	2	-	2	2	2	2	2	2	2	2
PREVOTELLA DENTICOLA	2	2	-	2	2	2	2	2	2	2	2
PREVOTELLA DISIENS	2	2	-	2	2	2	2	2	2	2	2
PREVOTELLA INTERMEDIA	2	2	-	2	2	2	2	2	2	2	2
PREVOTELLA LOESCHEII	2	2	2	2	2	2	2	2	2	2	2
PREVOTELLA MELANINOGENICA	2	2	2	2	2	2	2	2	2	2	2
PREVOTELLA NANCEIENSIS	2	-	-	-	2	2	2	2	-	2	2
PREVOTELLA NIGRESCENS	2	2	-	2	2	2	2	2	2	2	2
PREVOTELLA ORALIS	2	2	-	2	2	2	2	2	2	2	2
PREVOTELLA ORIS	2	2	-	2	2	2	2	2	2	2	2
PREVOTELLA PALLENS	2	-	-	2	2	2	2	2	-	2	2
PREVOTELLA TANNERAE	-	2	-	2	2	2	2	2	2	2	2
PROACTINOMYCES	1	-	-	-	-	-	-	-	-	-	1
PROMICROMONOSPORA	1	-	-	1	-	-	-	-	1	-	1
PROMYXOBACTERIUM	1	-	-	-	-	-	-	-	-	-	1
PROPIONIBACTER	1	-	-	-	-	-	-	-	1	-	1
PROPIONIBACTERIUM ACNES	2	2	1	2	-	2	-	-	2	-	2
PROPIONIBACTERIUM AUSTRALIENSE	2	-	-	2	-	-	-	-	-	-	2
PROPIONIBACTERIUM AVIDUM	2	2	-	2	-	-	-	-	2	-	2
PROPIONIBACTERIUM GRANULOSUM	2	2	-	2	-	2	-	-	2	-	2

PROPIONIBACTERIUM LYMPHOPHILUM	-	-	-	-	-	-	-	-	2	-	2
PROPIONIBACTERIUM PROPIONICUM	2	-	-	2	-	OP	-	-	2	-	2
PROPIONICIMONAS	1	-	-	1	-	-	-	-	-	-	1
PROPIONIFERAX	1	-	-	1	-	-	-	-	1	-	1
PROPIONIGENIUM	1	-	-	1	-	-	-	-	1	-	1
PROPIONIMICROBIUM	2	2	-	2	-	-	-	-	-	-	2
PROPIONISPIRA	1	-	-	1	-	-	-	-	1	-	1
PROPIONISPORA	1	-	-	1	-	-	-	-	-	-	1
PROPIONIVIBRIO	1	-	-	1	-	-	-	-	1	-	1
PROSTHECOBACTER	1	-	-	1	-	-	-	-	1	-	1
PROSTHECOCHLORIS	1	-	-	1	-	-	-	-	1	-	1
PROSTHECOMICROBIUM	1	-	-	1	-	-	-	-	1	-	1
PROTAMINOBACTER	1	-	-	-	-	-	-	-	-	-	1
PROTEINIBORUS	1	-	-	-	-	-	-	-	-	-	1
PROTEINIPHILUM	1	-	-	-	-	-	-	-	-	-	1
PROTEUS HAUSERI	2	-	2	2	-	2	-	-	-	-	2
PROTEUS INCONSTANTS	-	2	-	2	-	2	-	-	2	-	2
PROTEUS MIRABILIS	2	2	2	2	2	2	2	2	2	2	2
PROTEUS MORGANII	-	2	-	2	-	2	2	-	2	-	2
PROTEUS PENNERI	2	2	-	2	2	2	-	2	2	2	2
PROTEUS SHIGELLOIDES	2	-	-	-	-	2	-	-	-	-	2
PROTEUS VULGARIS	2	2	2	2	2	2	2	2	2	2	2
PROTOMONAS	1	-	-	-	-	-	-	-	-	-	1
PROTOTHECA WICKERHAMII	-	-	1	-	-	-	-	-	-	-	1
PROVIDENCIA ALCALIFACIENS	2	2	2	2	2	2	2	2	2	2	2
PROVIDENCIA RETTGERI	2	2	2	2	2	2	2	2	2	2	2
PROVIDENCIA RUSTIGIANII	2	2	-	2	2	2	2	2	2	2	2
PROVIDENCIA STUARTII	2	2	1	2	2	2	2	2	2	2	2
PSEUDACIDOVORAX	1	-	-	-	-	-	-	-	-	-	1

PSEUDAMINOBACTER	1	-	-	1	-	-	-	-	1	-	1
PSEUDIDIOMARINA	1	-	-	-	-	-	-	-	-	-	1
PSEUDOALTEROMONAS PISCICIDA	1	-	-	1	-	-	-	-	2	-	1
PSEUDOAMYCOLATA	1	-	-	-	-	-	-	-	-	-	1
PSEUDOBUTYRIVIBRIO	1	-	-	1	-	-	-	-	1	-	1
PSEUDOCHROBACTRUM	1	-	-	-	-	-	-	-	-	-	1
PSEUDOCLAVIBACTER	1	-	-	1	-	-	-	-	-	-	1
PSEUDOMONAS AERUGINOSA	2	2	2	2	2	2	2	2	2	2	2
PSEUDOMONAS ALCALIGENES	2	2	-	2	-	-	-	-	2	-	2
PSEUDOMONAS ANGUILLISEPTICA	2	2	-	2	-	-	-	-	2	-	2
PSEUDOMONAS LUTEOLA	2	-	-	2	-	-	-	-	2	-	2
PSEUDOMONAS MENDOCINA	2	2	-	2	-	-	-	-	2	-	2
PSEUDOMONAS ORYZIHABITANS	2	-	-	2	-	-	-	-	2	-	2
PSEUDOMONAS OTITIDIS	2	-	-	-	-	-	-	-	-	-	2
PSEUDOMONAS PLECOGLOSSICIDA	2	-	-	2	-	-	-	-	-	-	2
PSEUDOMONAS PUTIDA	-	2	-	1	-	-	-	-	1	-	2
PSEUDOMONAS STUTZERI	-	2	-	1	-	-	-	-	1	-	2
PSEUDOMONAS SIMIAE	2	-	-	-	-	-	-	-	-	-	2
PSEUDONOCARDIA	1	-	-	1	-	-	-	-	1	-	1
PSEUDORAMIBACTER ALACTOLYTICUS	2	2	-	2	-	-	-	-	2	-	2
PSEUDORHODOBACTER	1	-	-	1	-	-	-	-	-	-	1
PSEUDOSPHINGOBACTERIUM	1	-	-	-	-	-	-	-	-	-	1
PSEUDOSPIRILLUM	1	-	-	1	-	-	-	-	-	-	1
PSEUDOVIBRIO	1	-	-	-	-	-	-	-	-	-	1
PSEUDOXANTHOBACTER	1	-	-	-	-	-	-	-	-	-	1
PSEUDOXANTHOMONAS	1	-	-	1	-	-	-	-	-	-	1
PSYCHRILYOBACTER	1	-	-	-	-	-	-	-	-	-	1
PSYCHROBACTER PHENYLPYRUVICUS	2	2	-	2	-	-	-	-	2	-	2
PSYCHROBACTER PULMONIS	2	-	-	2	-	-	-	-	-	-	2

PSYCHROFLEXUS	1	-	-	1	-	-	-	-	-	-	1
PSYCHROMONAS	1	-	-	1	-	-	-	-	-	-	1
PSYCHROSERPENS	1	-	-	1	-	-	-	-	1	-	1
PULLULANIBACILLUS	1	-	-	-	-	-	-	-	-	-	1
PUSILLIMONAS	1	-	-	-	-	-	-	-	-	-	1
PYXICOCCUS	1	-	-	1	-	-	-	-	-	-	1
PYXIDICOCCUS	1	-	-	-	-	-	-	-	-	-	1
QUADRICOCCUS	-	-	-	1	-	-	-	-	-	-	1
QUADRISPHAERA	1	-	-	-	-	-	-	-	-	-	1
QUINELLA	-	-	-	1	-	-	-	-	1	-	1
RAHNELLA	1	-	-	1	-	-	-	-	1	-	1
RALSTONIA MANNITOLYTICA	2	-	-	2	-	-	-	-	-	-	2
RALSTONIA PICKETTII	-	2	-	1	-	-	-	-	1	-	2
RALSTONIA SOLANACEARUM	2	-	-	1	-	-	-	-	2	-	2
RAMIBACTERIUM	1	-	-	-	-	-	-	-	-	-	1
RAMLIBACTER	1	-	-	1	-	-	-	-	-	-	1
RAOULTELLA ORNITHINOLYTICA	2	2	-	2	-	-	-	-	-	-	2
RAOULTELLA TERRIGENA	-	-	2	1	-	-	-	-	-	-	1
RAROBACTER	1	-	-	1	-	-	-	-	1	-	1
RATHAYIBACTER	1	-	-	1	-	-	-	-	1	-	1
REINEKEA	1	-	-	1	-	-	-	-	-	-	1
RENIBACTERIUM SALMONINARUM	2	2	-	2	-	3	-	-	2	-	2
RENOBACTER	1	-	-	-	-	-	-	-	-	-	1
RHABDOCHROMATIUM	1	-	-	1	-	-	-	-	1	-	1
RHEINHEIMERA	1	-	-	1	-	-	-	-	-	-	1
RHIZOBACTER	1	-	-	1	-	-	-	-	1	-	1
RHIZOBIUM	1	-	-	1	-	-	-	-	1	-	1

RHIZOMONAS	**1**	-	-	-	-	-	-	-	1	-	**1**
RHODANOBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
RHODOBACA	**1**	-	-	-	-	-	-	-	-	-	**1**
RHODOBACTER	**1**	-	-	1	-	-	-	-	1	-	**1**
RHODOBIUM	**1**	-	-	1	-	-	-	-	1	-	**1**
RHODOBLASTUS	**1**	-	-	1	-	-	-	-	-	-	**1**
RHODOCISTA	**1**	-	-	1	-	-	-	-	1	-	**1**
RHODOCOCCUS EQUI	**2**	2	2	2	2	2	2	2	2	2	**2**
RHODOCOCCUS GORDONIAE	**2**	-	-	2	-	-	-	-	-	-	**2**
RHODOCYCLUS	**1**	-	-	1	-	-	-	-	1	-	**1**
RHODOFERAX	**1**	-	-	1	-	-	-	-	1	-	**1**
RHODOGLOBUS	**1**	-	-	1	-	-	-	-	-	-	**1**
RHODOMICROBIUM	**1**	-	-	1	-	-	-	-	1	-	**1**
RHODONELLUM	**1**	-	-	-	-	-	-	-	-	-	**1**
RHODOPILA	**1**	-	-	1	-	-	-	-	1	-	**1**
RHODOPIRELLULA	**1**	-	-	1	-	-	-	-	-	-	**1**
RHODOPLANES	**1**	-	-	1	-	-	-	-	1	-	**1**
RHODOPSEUDOMONAS	**1**	-	-	1	-	-	-	-	1	-	**1**
RHODOSPIRILLUM	**1**	-	-	1	-	-	-	-	1	-	**1**
RHODOTHALASSIUM	**1**	-	-	1	-	-	-	-	-	-	**1**
RHODOTHERMUS	**1**	-	-	-	-	-	-	-	1	-	**1**
RHODOTORULA MUCILAGINOSA	**-**	-	2	-	-	-	-	-	-	-	**2**
RHODOVIBRIO	**1**	-	-	1	-	-	-	-	-	-	**1**
RHODOVULUM	**1**	-	-	1	-	-	-	-	1	-	**1**
RICKETTSIA AESCHLIMANNII	**-**	-	-	-	-	-	-	-	3	3	**3**
RICKETTSIA AFRICAE	**-**	-	-	3	2	2	2	2	3	3	**3**
RICKETTSIA AKARI	**-**	3	-	3	3	3	3	3	3	3	**3**
RICKETTSIA AUSTRALIS	**-**	3	-	3	2	2	2	2	3	3	**3**
RICKETTSIA BELLII	**-**	-	-	3	2	2	2	2	3	3	**3**

RICKETTSIA CANADENSIS	-	3	-	3	3	3	3	3	3	3	3
RICKETTSIA CONORII	-	3	-	3	3	3	3	3	3	3	3
RICKETTSIA FELIS	-	-	-	2	2	2	2	2	-	3	3
RICKETTSIA HELVETICA	-	2	-	2	2	2	2	2	3	3	3
RICKETTSIA HONEI	-	-	-	2	2	2	2	2	3	3	3
RICKETTSIA JAPONICA	-	3	-	3	2	2	2	2	3	3	3
RICKETTSIA MASSILIAE	-	2	-	1	2	2	2	2	3	3	3
RICKETTSIA MONTANA	-	3	-	3	3	3	3	3	3	3	3
RICKETTSIA PARKERI	-	2	-	2	2	2	2	2	3	3	3
RICKETTSIA PROWAZEKI	-	3	-	3	3	3	3	3	3	3	3
RICKETTSIA RHIPICEPHALI	-	2	-	2	2	2	2	2	-	3	3
RICKETTSIA RICKETTSII	-	3	-	3	3	3	3	3	3	3	3
RICKETTSIA TSUTSUGAMUSHI	-	3	-	3	3	3	3	3	-	3	3
RICKETTSIA TYPHI	-	3	-	3	3	3	3	3	3	3	3
RICKETTSIELLA CHIRONOMI	-	2	-	1	-	-	-	-	1	-	3
RICKETTSIELLA GRYLII	-	2	-	1	-	-	-	-	1	-	1
RICKETTSIELLA POPILAE	-	2	-	1	-	-	-	-	1	-	1
RICKETTSIELLA STETHORAE	-	2	-	1	-	-	-	-	1	-	1
RIEMERELLA ANATIPESTIFER	2	2	-	2	-	-	-	-	2	-	2
RIEMERELLA COLUMBINA	2	-	-	2	-	-	-	-	2	-	2
RIKENELLA	1	-	-	1	-	-	-	-	1	-	1
ROBIGINITALEA	1	-	-	1	-	-	-	-	-	-	1
ROBIGINITOMACULUM	1	-	-	-	-	-	-	-	-	-	1
ROCHALIMAEA QUINTANA	1	2	-	-	-	2	-	2	-	2	2
ROSEATELES	1	-	-	1	-	-	-	-	-	-	1
ROSEBURIA	1	-	-	1	-	-	-	-	1	-	1
ROSEIBACTERIUM	1	-	-	-	-	-	-	-	-	-	1
ROSEICYCLUS	1	-	-	-	-	-	-	-	-	-	1
ROSEIFLEXUS	1	-	-	1	-	-	-	-	-	-	1

ROSEINATRONOBACTER	1	-	-	1	-	-	-	-	-	-	1
ROSEISALINUS	1	-	-	-	-	-	-	-	-	-	1
ROSEIVIVAX	1	-	-	1	-	-	-	-	-	-	1
ROSEOBACTER	1	-	-	1	-	-	-	-	1	-	1
ROSEOCOCCUS	1	-	-	1	-	-	-	-	1	-	1
ROSEOMONAS CERVICALIS	1	-	-	2	-	-	-	-	-	-	1
ROSEOMONAS FAURIAE	1	-	-	2	-	-	-	-	-	-	1
ROSEOMONAS GILARDII	1	-	-	2	-	-	-	-	-	-	1
ROSEOMONAS MUCOSA	1	-	-	2	-	-	-	-	-	-	1
ROSEOSPIRA	1	-	-	1	-	-	-	-	-	-	1
ROSEOSPIRILLUM	1	-	-	1	-	-	-	-	-	-	1
ROSEOVARIUS	1	-	-	1	-	-	-	-	-	-	1
ROTHIA DENTOCASRIOSA	2	-	-	2	-	-	-	-	1	-	2
ROTHIA MUCILAGINOSA	2	-	-	2	-	-	-	-	-	-	2
RUANIA	1	-	-	-	-	-	-	-	-	-	1
RUBELLIMICROBIUM	1	-	-	-	-	-	-	-	-	-	1
RUBRIMONAS	1	-	-	1	-	-	-	-	-	-	1
RUBRITALEA	1	-	-	-	-	-	-	-	-	-	1
RUBRITEPIDA	1	-	-	1	-	-	-	-	-	-	1
RUBRIVIVAX	1	-	-	1	-	-	-	-	1	-	1
RUBROBACTER	1	-	-	1	-	-	-	-	1	-	1
RUDANELLA	1	-	-	-	-	-	-	-	-	-	1
RUEGERIA	1	-	-	1	-	-	-	-	-	-	1
RUMINOBACTER	1	-	-	1	-	-	-	-	1	-	1
RUMINOCOCCUS PRODUCTUS	1	2	-	1	-	-	-	-	1	-	1
RUNELLA	1	-	-	1	-	-	-	-	1	-	1
SACCHARIBACILLUS	1	-	-	-	-	-	-	-	-	-	1
SACCHARIBACTER	1	-	-	-	-	-	-	-	1	-	1

SACCHAROCOCCUS	**1**	-	-	1	-	-	-	-	1	-	**1**
SACCHAROMONOSPORA	**1**	-	-	1	-	-	-	-	1	-	**1**
SACCHAROPHAGUS	**1**	-	-	1	-	-	-	-	-	-	**1**
SACCHAROPOLYSPORA RECTIVIRGULA	**1**	-	-	1	-	2	-	-	1	-	**1**
SACCHAROSPIRILLUM	**1**	-	-	1	-	-	-	-	-	-	**1**
SACCHAROTHRIX	**1**	-	-	1	-	-	-	-	1	-	**1**
SAGITTULA	**1**	-	-	1	-	-	-	-	1	-	**1**
SALANA	**1**	-	-	1	-	-	-	-	-	-	**1**
SALEGENTIBACTER	**1**	-	-	1	-	-	-	-	-	-	**1**
SALIBACILLUS	**1**	-	-	1	-	-	-	-	-	-	**1**
SALIMICROBIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
SALINIBACTER	**1**	-	-	1	-	-	-	-	-	-	**1**
SALINIBACTERIUM	**1**	-	-	1	-	-	-	-	-	-	**1**
SALINICOCCUS	**1**	-	-	1	-	-	-	-	1	-	**1**
SALINICOLA	**1**	-	-	-	-	-	-	-	-	-	**1**
SALINIMICROBIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
SALINIMONAS	**1**	-	-	-	-	-	-	-	-	-	**1**
SALINISPHAERA	**1**	-	-	1	-	-	-	-	-	-	**1**
SALINISPORA	**1**	-	-	-	-	-	-	-	-	-	**1**
SALINIVIBRIO	**1**	-	-	1	-	-	-	-	1	-	**1**
SALINOSPORA	**1**	-	-	-	-	-	-	-	-	-	**1**
SALIPIGER	**1**	-	-	1	-	-	-	-	-	-	**1**
SALIRHABDUS	**1**	-	-	-	-	-	-	-	-	-	**1**
SALMONELLA ABORTUSEQUI	**-**	-	-	-	-	2 3	2	2	-	-	**2**
SALMONELLE ABORTUSOVIS	**-**	-	-	-	-	2 3	2	2	-	-	**2**
SALMONELLA ARIZONAE	**-**	2	-	-	2	2	2	2	-	2	**2**
SALMONELLA BONGORI	**2**	-	2	2	2	2	2	2	-	2	**2**
SALMONELLA CHOLERASUIS	**-**	2	-	2	2	2	2	2	2	2	**2**
SALMONELLA ENTERICA	**2**	-	2	2	2	2	2	2	2	2	**2**

SALMONELLA ENTERITIDIS	-	2	-	-	2	2	2	2	2	2	2
SALMONELLA GALLINARUM	2	-	-	-	2	2 3	2	2	-	2	2
SALMONELLA INFANTIS	-	2	-	-	2	2	2	2	-	2	2
SALMONELLA PARATYPHI	-	2	-	-	2	2	2	2	-	2	2
SALMONELLA POONA	-	-	2	-	2	2	2	2	-	2	2
SALMONELLA PULLORUM	-	-	-	-	-	2 3	2	2	-	2	2
SALMONELLA SUIS	-	2	-	-	2	2	2	2	-	2	2
SALMONELLA TYPHI	-	2	-	3	3	3	3	3	3	3	3
SALMONELLA TYPHIMURIUM	-	2	-	-	2	2	2	2	2	2	2
SALSUGINIBACILLUS	1	-	-	-	-	-	-	-	-	-	1
SAMSONIA	1	-	-	1	-	-	-	-	-	-	1
SANDARAKINORHABDUS	1	-	-	-	-	-	-	-	-	-	1
SANGUIBACTER INULINUS	-	-	-	2	-	-	-	-	2	-	2
SANGUIBACTER KEDDIEII	2	-	-	2	-	-	-	-	2	-	2
SANGUIBACTER SUAREZII	2	-	-	2	-	-	-	-	2	-	2
SAPROSPIRA	1	-	-	1	-	-	-	-	1	-	1
SARCINA	1	-	-	1	-	-	-	-	1	-	1
SARCOBIUM LYTICUM	-	2	-	-	-	-	-	-	-	-	2
SARRACENIOSPORA	1	-	-	-	-	-	-	-	-	-	1
SAXEIBACTER	1	-	-	-	-	-	-	-	-	-	1
SCARDOVIA	1	-	-	1	-	-	-	-	-	-	1
SCHINERIA	1	-	-	1	-	-	-	-	-	-	1
SCHLEGELELLA	1	-	-	1	-	-	-	-	-	-	1
SCHWARTZIA	1	-	-	1	-	-	-	-	1	-	1
SEBEKIA	1	-	-	-	-	-	-	-	-	-	1
SEDIMENTIBACTER HONGKONGENSIS	2	-	-	-	-	-	-	-	-	-	2
SEDIMENTICOLA	1	-	-	-	-	-	-	-	-	-	1
SEDIMINIBACILLUS	1	-	-	-	-	-	-	-	-	-	1
SEGETIBACTER	1	-	-	-	-	-	-	-	-	-	1

SEGNILIPARUS ROTUNDUS	**2**	-	-	-	-	-	-	-	-	-	**2**
SEGNILIPARUS RUGOSUS	**2**	-	-	-	-	-	-	-	-	-	**2**
SEINONELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
SEJONGIA	**1**	-	-	-	-	-	-	-	-	-	**1**
SELENOMONAS ARTEMIDIS	**2**	2	-	2	-	-	-	-	2	-	**2**
SELENOMONAS DIANAE	**2**	2	-	2	-	-	-	-	2	-	**2**
SELENOMONAS FLUEGGEI	**2**	2	-	2	-	-	-	-	2	-	**2**
SELENOMONAS INFELIX	**-**	2	-	2	-	-	-	-	2	-	**2**
SELENOMONAS NOXIA	**2**	2	-	2	-	-	-	-	2	-	**2**
SELIBERIA	**1**	-	-	1	-	-	-	-	1	-	**1**
SERINICOCCUS	**1**	-	-	1	-	-	-	-	-	-	**1**
SERPULINA	**1**	2	-	-	2	2	-	2	2	2	**2**
SERRATIA ENTOMOPHILA	**-**	2	-	1	-	-	-	-	1	-	**1**
SERRATIA FONTICOLA	**-**	2	-	1	-	-	-	-	1	-	**1**
SERRATIA GRIMESII	**2**	2	-	2	-	-	-	-	2	-	**2**
SERRATIA LIQUEFACIENS	**2**	2	1	2	-	-	-	-	-	-	**2**
SERRATIA MARCESCENS	**2**	2	1	2	-	OP	-	-	2	-	**2**
SERRATIA ODORIFERA	**-**	-	2	1	-	-	-	-	1	-	**2**
SERRATIA PROTEANACULANS	**2**	2	-	-	-	-	-	-	2	-	**2**
SERRATIA RUBIDAEA	**2**	2	-	2	-	-	-	-	2	-	**2**
SHARPEA	**1**	-	-	-	-	-	-	-	-	-	**1**
SHEWANELLA ALGAE	**2**	2	-	2	-	-	-	-	2	-	**2**
SHEWANELLA PUTREFACIENS	**-**	2	-	1	-	-	-	-	1	-	**2**
SHIGELLA BOYDII	**2**	2	2	2	2	2	2	2	2	2	**2**
SHIGELLA DYSENTERIAE	**-**	2 3	-	2	2 3	3	3	3	2 3	3	**3**
SHIGELLA FLEXNERI	**2**	2	2	2	2	2	2	2	2	2	**2**
SHIGELLA SONNEI	**2**	2	2	2	2	2	2	2	2	2	**2**
SHIMAZUELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
SHINELLA	**1**	-	-	-	-	-	-	-	-	-	**1**

SHUTTLEWORTHIA SATELLES	**2**	-	-	2	-	-	-	-	-	-	**2**
SILANIMONAS	**1**	-	-	-	-	-	-	-	-	-	**1**
SILICIBACTER	**1**	-	-	1	-	-	-	-	-	-	**1**
SILVIMONAS	**1**	-	-	-	-	-	-	-	-	-	**1**
SIMIDUIA	**1**	-	-	-	-	-	-	-	-	-	**1**
SIMONSIELLA	**1**	-	-	1	-	-	-	-	1	-	**1**
SIMPLICISPIRA	**1**	-	-	-	-	-	-	-	-	-	**1**
SIMSONIELLA	**1**	-	-	1	-	-	-	-	-	-	**1**
SINGULARIMONAS	**1**	-	-	-	-	-	-	-	-	-	**1**
SINGULISPHAERA	**1**	-	-	-	-	-	-	-	-	-	**1**
SINOBACA	**1**	-	-	-	-	-	-	-	-	-	**1**
SINOBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
SINOCOCCUS	**1**	-	-	-	-	-	-	-	-	-	**1**
SINOCURTOBACTERIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
SINOMONAS	**1**	-	-	-	-	-	-	-	-	-	**1**
SINORHIZOBIUM	**1**	-	-	1	-	-	-	-	1	-	**1**
SKERMANELLA	**1**	-	-	1	-	-	-	-	-	-	**1**
SKERMANIA	**1**	-	-	1	-	-	-	-	1	-	**1**
SLACKIA EXIGUA	**2**	-	-	2	-	-	-	-	-	-	**2**
SMARAGDICOCCUS	**1**	-	-	-	-	-	-	-	-	-	**1**
SMITHELLA	**1**	-	-	1	-	-	-	-	-	-	**1**
SODALIS	**1**	-	-	1	-	-	-	-	-	-	**1**
SOEHNGENIA	**1**	-	-	1	-	-	-	-	-	-	**1**
SOLIMONAS	**1**	-	-	-	-	-	-	-	-	-	**1**
SOLIRUBROBACTER	**1**	-	-	1	-	-	-	-	-	-	**1**
SORANGIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
SPELEOMYCES	**1**	-	-	-	-	-	-	-	-	-	**1**
SPHAERISPORANGIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
SPHAEROBACTER	**1**	-	-	1	-	-	-	-	1	-	**1**

SPHAEROPHORUS	1	-	-	-	-	-	-	-	-	-	1
SPHAEROSPORANGIUM	1	-	-	-	-	-	-	-	-	-	1
SPHAEROTILUS	1	-	-	1	-	-	-	-	1	-	1
SPHINGOBACTERIUM MIZUTAII	2	-	-	-	-	-	-	-	-	-	1
SPHINGOBACTERIUM MULTIVORUM	2	2	2	2	-	-	-	-	2	-	2
SPHINGOBACTERIUM SPIRITIVORUM	2	2	2	2	-	-	-	-	2	-	2
SPHINGOBACTERIUM THALPOPHILUM	2	2	-	2	-	-	-	-	2	-	2
SPHINGOBIUM	1	-	-	1	-	-	-	-	-	-	1
SPHINGOMONAS PARAPAUCIMOBILIS	2	-	-	2	-	-	-	-	2	-	2
SPHINGOMONAS PAUCIMOBILIS	2	2	2	2	-	-	-	-	2	-	2
SPHINGOMONAS YANOIKUYAE	-	2	-	1	-	-	-	-	1	-	1
SPHINGOPYXIS	1	-	-	1	-	-	-	-	-	-	1
SPHINGOSINICELLA	1	-	-	-	-	-	-	-	-	-	1
SPIRILLIPLANES	1	-	-	1	-	-	-	-	1	-	1
SPIRILLOSPORA	1	-	-	1	-	-	-	-	1	-	1
SPIRILLUM	1	-	-	1	-	-	-	-	1	-	1
SPIROCHAETA	1	-	-	1	-	-	-	-	1	-	1
SPIROPLASMA APIS	1	2	-	1	-	-	-	-	1	-	2
SPIROPLASMA MELLIFERUM	1	2	-	1	-	-	-	-	1	-	2
SPIROPLASMA MIRUM	1	2	-	2	-	2	-	-	2	-	2
SPIROSOMA	1	-	-	1	-	-	-	-	1	-	1
SPONGIIBACTER	1	-	-	-	-	-	-	-	-	-	1
SPORACETIGENIUM	1	-	-	-	-	-	-	-	-	-	1
SPORANAEROBACTER	1	-	-	1	-	-	-	-	-	-	1
SPORICHTHYA	1	-	-	1	-	-	-	-	1	-	1
SPOROBACTER	1	-	-	1	-	-	-	-	1	-	1
SPOROBACTERIUM	1	-	-	1	-	-	-	-	1	-	1
SPOROCYTOPHAGA	1	-	-	1	-	-	-	-	1	-	1
SPOROHALOBACTER	1	-	-	1	-	-	-	-	1	-	1

SPOROLACTOBACILLUS	1	-	-	1	-	-	-	-	1	-	1
SPOROMUSA	1	-	-	1	-	-	-	-	1	-	1
SPOROSARCINA	1	-	-	1	-	-	-	-	1	-	1
SPOROTALEA	1	-	-	-	-	-	-	-	-	-	1
SPOROTOMACULUM	1	-	-	1	-	-	-	-	-	-	1
STACKEBRANDTIA	1	-	-	-	-	-	-	-	-	-	1
STALEYA	1	-	-	1	-	-	-	-	-	-	1
STANIERELLA	1	-	-	-	-	-	-	-	-	-	1
STAPHYLOCOCCUS AUREUS	2	2	2	2	2	2	2	2	2	2	2
STAPHYLOCOCCUS CAPITIS	-	2	-	1	-	-	-	-	-	-	2
STAPHYLOCOCCUS CAPRAE	2	2	-	2	-	-	-	-	2	-	2
STAPHYLOCOCCUS CHROMOGENES	-	2	-	1	-	-	-	-	-	-	2
STAPHYLOCOCCUS COHNII	-	2	-	1	-	-	-	-	1	-	2
STAPHYLOCOCCUS EPIDERMIDIS	2	2	1 2	2	-	2	-	-	2	-	2
STAPHYLOCOCCUS FELIS	2	2	-	2	-	-	-	-	2	-	2
STAPHYLOCOCCUS HAEMOLYTICUS	2	2	2	2	-	-	-	-	2	-	2
STAPHYLOCOCCUS HOMINIS	2	-	-	2	-	-	-	-	1	-	2
STAPHYLOCOCCUS HYICUS	2	2	-	2	-	-	-	-	2	-	2
STAPHYLOCOCCUS INTERMEDIUS	2	2	-	2	-	-	-	-	2	-	2
STAPHYLOCOCCUS LUGDUNENSIS	2	2	1 2	2	-	-	-	-	2	-	2
STAPHYLOCOCCUS LUTRAE	2	-	-	2	-	-	-	-	2	-	2
STAPHYLOCOCCUS NEPALENSIS	2	-	-	2	-	-	-	-	-	-	2
STAPHYLOCOCCUS PASTEURI	2	3	-	2	-	-	-	-	2	-	2
STAPHYLOCOCCUS SACCHAROLYTICUS	2	2	-	2	-	-	-	-	2	-	2
STAPHYLOCOCCUS SAPROPHYTICUS	2	2	1	2	-	-	-	-	2	-	2
STAPHYLOCOCCUS SCHLEIFERI	2	2	-	2	-	-	-	-	2	-	2
STAPHYLOCOCCUS SCIURI	-	2	-	1	-	-	-	-	2	-	2
STAPHYLOCOCCUS SIMIAE	2	-	-	-	-	-	-	-	-	-	2
STAPHYLOCOCCUS SIMULANS	-	2	2	1	-	-	-	-	1	-	2

STAPHYLOCOCCUS XYLOSUS	-	-	2	1	-	-	-	-	1	-	2
STAPPIA	1	-	-	1	-	-	-	-	-	-	1
STARKEYA	1	-	-	1	-	-	-	-	-	-	1
STELLA	1	-	-	1	-	-	-	-	1	-	1
STENOTROPHOMONAS AFRICANA	-	-	-	-	-	-	-	-	2	-	2
STENOTROPHOMONAS MALTOPHILIA	2	2	1	2	-	-	-	-	2	-	2
STENOXYBACTER	1	-	-	-	-	-	-	-	-	-	1
STEROIDOBACTER	1	-	-	-	-	-	-	-	-	-	1
STEROLIBACTERIUM	1	-	-	1	-	-	-	-	-	-	1
STIGMATELLA	1	-	-	1	-	-	-	-	1	-	1
STOMATOCOCCUS	1	-	-	-	-	-	-	-	1	-	1
STREPTACIDIPHILUS	1	-	-	1	-	-	-	-	-	-	1
STREPTIMONOSPORA	1	-	-	-	-	-	-	-	-	-	1
STREPTOALLOMORPHA	1	-	-	-	-	-	-	-	-	-	1
STREPTOALLOTEICHUS	1	-	-	1	-	-	-	-	1	-	1
STREPTOBACILLUS MONILIFORMIS	2	2	-	2	2	2	2	2	2	-	2
STREPTOBACTERIUM	1	-	-	-	-	-	-	-	-	-	1
STREPTOCOCCUS ACIDOMINIMUS	2	2	-	2	2	2	2	2	2	2	2
STREPTOCOCCUS AGALACTIAE	2	2	2	2	2	2	2	2	2	2	2
STREPTOCOCCUS ANGINOSUS	2	2	2	2	2	2	2	2	2	2	2
STREPTOCOCCUS BOVIS	2	2	1 2	2	2	2	2	2	2	2	2
STREPTOCOCCUS CABALLI	2	-	-	-	2	2	2	2	2	2	2
STREPTOCOCCUS CANIS	2	2	-	2	2	2	2	2	2	2	2
STREPTOCOCCUS CASTOREUS	2	-	-	-	2	2	2	2	-	2	2
STREPTOCOCCUS CONSTELLATUS	2	2	-	2	2	2	2	2	2	2	2
STREPTOCOCCUS DIDELPHIS	2	-	-	2	2	2	2	2	-	2	2
STREPTOCOCCUS DYSGALACTIAE	2	2	2	2	2	2	2	2	2	2	2
STREPTOCOCCUS EQUINUS	2	2	-	2	2	2	2	2	2	2	2
STREPTOCOCCUS EQUI	2	2	2	2	2	3	2	2	2	2	2

STREPTOCOCCUS GALLINACEUS	**2**	-	-	2	2	2	2	2	-	2	**2**
STREPTOCOCCUS GALLOLYTICUS	**2**	-	1	2	2	2	2	2	2	2	**2**
STREPTOCOCCUS HALICHOERI	**2**	-	-	-	2	2	2	2	-	2	**2**
STREPTOCOCCUS HENRYI	**2**	-	-	-	2	2	2	2	-	2	**2**
STREPTOCOCCUS INIAE	**2**	-	-	2	2	2	2	2	2	2	**2**
STREPTOCOCCUS INTERMEDIUS	**2**	2	-	2	2	2	2	2	2	2	**2**
STREPTOCOCCUS LUTETIENSIS	**2**	-	-	2	2	2	2	2	-	2	**2**
STREPTOCOCCUS MASSILIENSIS	**2**	-	-	-	2	2	2	2	-	2	**2**
STREPTOCOCCUS MITIS	**2**	2	2	2	2	2	2	2	2	2	**2**
STREPTOCOCCUS MUTANS	**2**	2	1	2	2	2	2	2	2	2	**2**
STREPTOCOCCUS ORALIS	**2**	2	-	2	2	2	2	2	2	2	**2**
STREPTOCOCCUS OVIS	**2**	-	-	2	2	2	2	2	-	2	**2**
STREPTOCOCCUS PARASANGUINIS	**2**	2	2	2	2	2	2	2	2	2	**2**
STREPTOCOCCUS PHOCAE	**2**	2	-	2	2	2	2	2	2	2	**2**
STREPTOCOCCUS PLURANIMALIUM	**2**	-	-	2	2	2	2	2	-	2	**2**
STREPTOCOCCUS PNEUMONIAE	**2**	2	2	2	2	2	2	2	2	2	**2**
STREPTOCOCCUS PORCINUS	**2**	2	-	2	2	2	2	2	2	2	**2**
STREPTOCOCCUS PSEUDOPNEUMONIAE	**2**	-	-	-	2	2	2	2	-	2	**2**
STREPTOCOCCUS PSEUDOPORCINUS	**2**	-	-	-	2	2	2	2	-	2	**2**
STREPTOCOCCUS PYOGENES	**2**	2	2	2	2	2	2	2	2	2	**2**
STREPTOCOCCUS SALIVARIUS	**2**	2	1	2	2	2	2	2	2	2	**2**
STREPTOCOCCUS SANGUINIS	**2**	2	2	2	2	2	2	2	2	2	**2**
STREPTOCOCCUS SINENSIS	**2**	-	-	2	2	2	2	2	-	2	**2**
STREPTOCOCCUS SOBRINUS	**2**	2	-	2	2	2	2	2	2	2	**2**
STREPTOCOCCUS SUIS	**2**	2	-	2	2	2	2	2	2	2	**2**
STREPTOCOCCUS UBERIS	**-**	2	-	1	2	2	2	2	1	2	**2**
STREPTOMONOSPORA	**1**	-	-	1	2	-	-	-	-	-	**1**
STREPTOMYCES SOMALIENSIS	**1**	2	1	2	-	2	-	-	2	-	**2**
STREPTOMYCES SCABIEI	**1**	2	1	1	-	-	-	-	1	-	**1**

STREPTOMYCOIDES	**1**	-	-	-	-	-	-	-	-	-	**1**
STREPTOSPORANGIUM	**1**	-	-	1	-	-	-	-	1	-	**1**
STREPTOVERTICILLIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
SUBDOLIGRANULUM	**1**	-	-	-	-	-	-	-	-	-	**1**
SUBTERCOLA	**1**	-	-	1	-	-	-	-	-	-	**1**
SUCCINICLASTICUM	**1**	-	-	1	-	-	-	-	1	-	**1**
SUCCINIMONAS	**1**	-	-	1	-	-	-	-	1	-	**1**
SUCCINISPIRA	**1**	-	-	1	-	-	-	-	-	-	**1**
SUCCINIVIBRIO	**1**	-	-	1	-	-	-	-	1	-	**1**
SULFITOBACTER	**1**	-	-	1	-	-	-	-	1	-	**1**
SULFOBACILLUS	**1**	-	-	1	-	-	-	-	1	-	**1**
SULFURICURVUM	**1**	-	-	-	-	-	-	-	-	-	**1**
SULFURIHYDROGENIBIUM	**1**	-	-	1	-	-	-	-	-	-	**1**
SULFURIMONAS	**1**	-	-	1	-	-	-	-	-	-	**1**
SULFURIVIRGA	**1**	-	-	-	-	-	-	-	-	-	**1**
SULFUROSPIRILLUM	**1**	-	-	1	-	-	-	-	1	-	**1**
SUTTERELLA WADSWORTHENSIS	**2**	-	-	2	-	-	-	-	2	-	**2**
SUTTONELLA INDOLOGENES	**2**	2	-	2	-	-	-	-	2	-	**2**
SYNTROPHOBACTER	**1**	-	-	1	-	-	-	-	1	-	**1**
SYNTROPHOBOTULUS	**1**	-	-	1	-	-	-	-	1	-	**1**
SYNTROPHOCOCCUS	**1**	-	-	1	-	-	-	-	1	-	**1**
SYNTROPHOMONAS	**1**	-	-	1	-	-	-	-	1	-	**1**
SYNTROPHORHABDUS	**1**	-	-	-	-	-	-	-	-	-	**1**
SYNTROPHOSPORA	**1**	-	-	1	-	-	-	-	1	-	**1**
SYNTROPHOTHERMUS	**1**	-	-	1	-	-	-	-	-	-	**1**
SYNTROPHUS	**1**	-	-	1	-	-	-	-	1	-	**1**
TANNERELLA FORSYTHENSIS	**-**	2	-	2	-	2	-	-	-	-	**2**
TATLOCKIA MACEACHERNII	**2**	2	-	2	-	2	-	-	2	-	**2**

TATLOCKIA MICDADEI	**2**	2	-	2	-	2	-	-	2	-	**2**
TATUMELLA PTYSEOS	**2**	2	-	2	-	2	-	-	2	-	**2**
TAXEOBACTER	**1**	-	-	-	-	2	-	-	-	-	**1**
TAYLORELLA EQUIGENITALIS	**-**	-	2	-	3	-	-	2	-		**2**
TEICHOCOCCUS	**1**	-	-	1	-	-	-	-	-	-	**1**
TELLURIA	**1**	-	-	1	-	-	-	-	1	-	**1**
TENACIBACULUM MARITIMUM	**2**	2	-	2	-	-	-	-	-	-	**2**
TENACIBACULUM OVOLYTICUM	**-**	-	2	-	-	-	-	-	-		**2**
TEPIDANAEROBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
TEPIDIBACTER	**1**	-	-	1	-	-	-	-	-	-	**1**
TEPIDICELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
TEPIDIMICROBIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
TEPIDIMONAS	**1**	-	-	1	-	-	-	-	-	-	**1**
TEPIDIPHILUS	**1**	-	-	1	-	-	-	-	-	-	**1**
TERASAKIELLA	**1**	-	-	1	-	-	-	-	-	-	**1**
TERRABACTER	**1**	-	-	1	-	-	-	-	1	-	**1**
TERRACOCCUS	**1**	-	-	1	-	-	-	-	1	-	**1**
TERRIBACILLUS	**1**	-	-	-	-	-	-	-	-	-	**1**
TERRIGLOBUS	**1**	-	-	-	-	-	-	-	-	-	**1**
TERRIMONAS	**1**	-	-	-	-	-	-	-	-	-	**1**
TESSARACOCCUS	**1**	-	-	1	-	-	-	-	-	-	**1**
TETRAGENOCOCCUS SOLITARIUS	**-**	-	-	-	-	-	-	1	-		**1**
TETRASPHAERA	**1**	-	-	1	-	-	-	-	-	-	**1**
TETRATHIOBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
THALASSOBACILLUS	**1**	-	-	-	-	-	-	-	-	-	**1**
THALASSOBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
THALASSOBACULUM	**1**	-	-	-	-	-	-	-	-	-	**1**
THALASSOBIUS	**1**	-	-	-	-	-	-	-	-	-	**1**
THALASSOLITUUS	**1**	-	-	1	-	-	-	-	-	-	**1**

THALASSOMONAS	1	-	-	1	-	-	-	-	-	-	1
THALASSOSPIRA	1	-	-	1	-	-	-	-	-	-	1
THAUERA	1	-	-	1	-	-	-	-	1	-	1
THAXTERA	1	-	-	-	-	-	-	-	-	-	1
THERMACETOGENIUM	1	-	-	1	-	-	-	-	-	-	1
THERMAEROBACTER	1	-	-	1	-	-	-	-	-	-	1
THERMANAEROMONAS	1	-	-	1	-	-	-	-	-	-	1
THERMANAEROVIBRIO	1	-	-	1	-	-	-	-	-	-	1
THERMICANUS	1	-	-	1	-	-	-	-	-	-	1
THERMINCOLA	1	-	-	-	-	-	-	-	-	-	1
THERMITHIOBACILLUS	1	-	-	1	-	-	-	-	-	-	1
THERMOACTINOMYCES	1	-	-	1	-	-	-	-	1	-	1
THERMOANAEROBACTER	1	-	-	1	-	-	-	-	1	-	1
THERMOANAEROBACTERIUM	-	1	1	-	-	-	-	1	-		1
THERMOANAEROBIUM	1	-	-	1	-	-	-	-	1	-	1
THERMOANAEROLINEA	1	-	-	-	-	-	-	-	-	-	1
THERMOBACILLUS	1	-	-	1	-	-	-	-	-	-	1
THERMOBACTERIUM	1	-	-	-	-	-	-	-	-	-	1
THERMOBACTEROIDES	1	-	-	-	-	-	-	-	1	-	1
THERMOBIFIDA	1	-	-	1	-	-	-	-	-	-	1
THERMOBISPORA	1	-	-	1	-	-	-	-	1	-	1
THERMOBRACHIUM	1	-	-	1	-	-	-	-	1	-	1
THERMOCHROMATIUM	1	-	-	1	-	-	-	-	-	-	1
THERMOCOCCUS	-	-	-	1	-	-	-	-	1	-	1
THERMOCRINIS	1	-	-	1	-	-	-	-	-	-	1
THERMOCRISPUM	1	-	-	1	-	-	-	-	1	-	1
THERMODESULFATATOR	1	-	-	1	-	-	-	-	-	-	1
THERMODESULFOBACTERIUM	-	-	1	-	-	-	-	1	-		1
THERMODESULFOBIUM	1	-	-	1	-	-	-	-	-	-	1

THERMODESULFORHABDUS	1	-	-	1	-	-	-	-	1	-	1
THERMODESULFOVIBRIO	1	-	-	1	-	-	-	-	1	-	1
THERMODESULFUROBACTERIUM	-	-	-	-	-	-	-	-	-		1
THERMOFLAVIMICROBIUM	1	-	-	-	-	-	-	-	-	-	1
THERMOHYDROGENIUM	1	-	-	1	-	-	-	-	1	-	1
THERMOLITHOBACTER	1	-	-	-	-	-	-	-	-	-	1
THERMOMICROBIUM	1	-	-	1	-	-	-	-	1	-	1
THERMOMONAS	1	-	-	1	-	-	-	-	-	-	1
THERMOMONOSPORA	1	-	-	1	-	-	-	-	1	-	1
THERMONEMA	1	-	-	1	-	-	-	-	1	-	1
THERMONOSPORA	1	-	-	-	-	-	-	-	-	-	1
THERMOPOLYSPORA	1	-	-	-	-	-	-	-	-	-	1
THERMOSEDIMINIBACTER	1	-	-	-	-	-	-	-	-	-	1
THERMOSICULUM	1	-	-	-	-	-	-	-	-	-	1
THERMOSINUS	1	-	-	-	-	-	-	-	-	-	1
THERMOSIPHO	1	-	-	1	-	-	-	-	-	-	1
THERMOSULFIDIBACTER	1	-	-	-	-	-	-	-	-	-	1
THERMOSYNTROPHA	1	-	-	-	-	-	-	-	1	-	1
THERMOTERRABACTERIUM	1	-	-	1	-	-	-	-	1	-	1
THERMOTOGA	1	-	-	1	-	-	-	-	1	-	1
THERMOVIBRIO	1	-	-	1	-	-	-	-	-	-	1
THERMOVIRGA	1	-	-	-	-	-	-	-	-	-	1
THERMUS	1	-	-	1	-	-	-	-	1	-	1
THETYSIA	1	-	-	-	-	-	-	-	-	-	1
THIALKALIMICROBIUM	1	-	-	1	-	-	-	-	-	-	1
THIALKALIVIBRIO	1	-	-	1	-	-	-	-	-	-	1
THIOALKALIMICROBIUM	1	-	-	1	-	-	-	-	-	-	1
THIOALKALIVIBRIO	1	-	-	1	-	-	-	-	-	-	1
THIOBACA	1	-	-	1	-	-	-	-	-	-	1

THIOBACILLUS	**1**	-	-	1	-	-	-	-	1	-	**1**
THIOBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
THIOCAPSA	**1**	-	-	1	-	-	-	-	1	-	**1**
THIOCLAVA	**1**	-	-	-	-	-	-	-	-	-	**1**
THIOCOCCUS	**1**	-	-	1	-	-	-	-	-	-	**1**
THIOCYSTIS	**1**	-	-	1	-	-	-	-	1	-	**1**
THIODICTYON	**1**	-	-	1	-	-	-	-	1	-	**1**
THIOFABA	**1**	-	-	-	-	-	-	-	-	-	**1**
THIOHALOMONAS	**1**	-	-	-	-	-	-	-	-	-	**1**
THIOHALOPHILUS	**1**	-	-	-	-	-	-	-	-	-	**1**
THIOHALORHABDUS	**1**	-	-	-	-	-	-	-	-	-	**1**
THIOHALOSPIRA	**1**	-	-	-	-	-	-	-	-	-	**1**
THIOLAMPROVUM	**1**	-	-	1	-	-	-	-	-	-	**1**
THIOMICROSPIRA	**1**	-	-	1	-	-	-	-	1	-	**1**
THIOMONAS	**1**	-	-	1	-	-	-	-	1	-	**1**
THIOPEDIA	**1**	-	-	1	-	-	-	-	1	-	**1**
THIOPHAEOCOCCUS	**1**	-	-	-	-	-	-	-	-	-	**1**
THIOREDUCTOR	**1**	-	-	-	-	-	-	-	-	-	**1**
THIORHODOCCOCUS	**1**	-	-	1	-	-	-	-	-	-	**1**
THIORHODOVIBRIO	**1**	-	-	1	-	-	-	-	1	-	**1**
THIOSPHAERA	**1**	-	-	-	-	-	-	-	-	-	**1**
THIOTHRIX	**1**	-	-	1	-	-	-	-	1	-	**1**
THORSELLIA	**1**	-	-	-	-	-	-	-	-	-	**1**
TINDALLIA	**1**	-	-	1	-	-	-	-	-	-	**1**
TISSIERELLA PRAEACUTA	**2**	2	-	2	-	-	-	-	2	-	**2**
TOLUMONAS	**1**	-	-	1	-	-	-	-	1	-	**1**
TRABULSIELLA	**1**	-	-	1	-	-	-	-	1	-	**1**
TRANQUILLIMONAS	**1**	-	-	-	-	-	-	-	-	-	**1**
TREPONEMA AMYLOVORUM	**-**	-	-	2	2	2	2	2	2	2	**2**

TREPONEMA BRENNABORENSE	-	-	2	2	2	2	2	-	2	2	2
TREPONEMA CARATEUM	-	2	-	2	2	2	2	2	2	2	2
TREPONEMA DENTICOLA	2	2	-	2	2	2	2	2	2	2	2
TREPONEMA LECITHINOLYTICUM	-	-	-	2	2	2	2	2	2	2	2
TREPONEMA MALTOPHILUM	-	-	-	2	2	2	2	2	2	2	2
TREPONEMA MEDIUM	-	-	-	2	2	2	2	2	2	2	2
TREPONEMA MINUTUM	-	-	-	2	2	2	2	2	1	2	1
TREPONEMA PALLIDUM	-	2	-	2	2	2	2	2	2	2	2
TREPONEMA PARALUISCUNICULI	-	2	-	2	2	2	2	2	2	2	2
TREPONEMA PARVUM	2	-	-	2	2	2	2	2	2	2	2
TREPONEMA PECTINOVORUM	2	-	2	2	2	2	2	2	2	2	2
TREPONEMA PERTENUE	-	2	-	2	2	2	2	2	2	2	2
TREPONEMA SOCRANSKII	-	2	-	2	2	2	2	2	2	2	2
TREPONEMA VINCENTII	-	-	-	2	2	2	2	2	2	2	2
TRICHOCOCCUS	1	-	-	1	-	-	-	-	1	-	1
TRICHOTOMOSPORA	1	-	-	-	-	-	-	-	-	-	1
TROPHERYMA WHIPPLEI	-	-	-	2	-	-	-	-	-	-	2
TROPICIBACTER	1	-	-	-	-	-	-	-	-	-	1
TROPICIMONAS	1	-	-	-	-	-	-	-	-	-	1
TRUEPERA	1	-	-	-	-	-	-	-	-	-	1
TSUKAMURELLA INCHO	-	2	-	2	-	-	-	-	2	-	2
TSUKAMURELLA INCHONENSIS	2	-	2	-	-	-	-	2	-	-	2
TSUKAMURELLA PULMONIS	2	-	-	2	-	-	-	-	2	-	2
TSUKAMURELLA TYROSINOSOLVENS	-	-	2	-	-	-	-	2	-	-	2
TUBERIBACILLUS	1	-	-	-	-	-	-	-	-	-	1
TUMEBACILLUS	1	-	-	-	-	-	-	-	-	-	1
TURICELLA OTITIDIS	2	2	-	2	-	-	-	-	2	-	2
TURICIBACTER	1	-	-	1	-	-	-	-	-	-	1
TURNERIELLA	1	-	-	-	-	-	-	-	-	-	1

ULIGINOSIBACTERIUM	1	-	-	-	-	-	-	-	-	-	1
ULVIBACTER	1	-	-	1	-	-	-	-	-	-	1
UMEZAWAEA	1	-	-	-	-	-	-	-	-	-	1
UNDIBACTERIUM	1	-	-	-	-	-	-	-	-	-	1
UREAPLASMA DIVERSUM	-	2	-	2	-	2	-	-	2	-	2
UREAPLASMA GALLORALE	-	-	-	2	-	2	-	-	2	-	2
UREAPLASMA PARVUM	-	-	-	2	-	2	-	-	-	-	2
UREAPLASMA UREALYTICUM	2	2	2	2	-	2	-	-	2	2	2
UREIBACILLUS	1	-	-	1	-	-	-	-	-	-	1
URUBURUELLA SUIS	2	-	-	-	-	-	-	-	-	1	2
VAGOCOCCUS LUTRAE	-	-	-	-	-	-	-	-	2	-	2
VAGOCOCCUS SALMONINARUM	2	2	-	2	-	-	-	-	2	-	2
VARIBACULUM CAMBRIENSE	2	-	-	2	-	-	-	-	-	-	2
VARIOVORAX	1	-	-	1	-	-	-	-	1	-	1
VEILLONELLA DENTICARIOSI	2	-	-	-	-	-	-	-	-	-	2
VEILLONELLA PARVULA	2	-	1	2	-	-	-	-	2	-	2
VERMINEPHROBACTER	1	-	-	-	-	-	-	-	-	-	1
VERRUCOMICROBIUM	1	-	-	1	-	-	-	-	1	-	1
VERRUCOSISPORA	1	-	-	1	-	-	-	-	-	-	1
VIBRIO AESTUARIANUS	-	2	-	1	2	2	2	2	1	2	2
VIBRIO ALGINOLYTICUS	2	2	1	2	2	2	2	2	2	2	2
VIBRIO CARCHARIAE	-	2	-	-	2	2	2	2	2	2	2
VIBRIO CINCINNATIENSIS	2	-	-	2	2	2	2	2	2	2	2
VIBRIO CHOLERAE	-	2	-	2	2	2	2	2	2	2	2
VIBRIO FLUVIALIS	2	-	-	2	2	2	2	2	2	2	2
VIBRIO FOETIDUS	-	2	-	-	2	2	2	2	-	2	2
VIBRIO FURNISSII	2	2	1	2	2	2	2	2	2	2	1

VIBRIO HARVEYI	**2**	-	-	2	2	2	2	2	1	2	**2**
VIBRIO ICHTHYOENTERI	**2**	-	-	2	2	2	2	2	2	2	**2**
VIBRIO METCHNIKOVII	**2**	2	-	2	2	2	2	2	2	2	**2**
VIBRIO MIMICUS	**2**	2	-	2	2	2	2	2	2	2	**2**
VIBRIO ORDALII	**2**	2	-	2	2	2	2	2	2	2	**2**
VIBRIO PARAHAEMOLYTICUS	**2**	2	2	2	2	2	2	2	2	2	**2**
VIBRIO PENAECIDA	**-**	2	-	1	2	2	2	2	1	2	**2**
VIBRIO PSEUDOTUBERCULOSIS	**-**	2	-	-	2	2	2	2	-	2	**2**
VIBRIO SALMONICIDA	**-**	2	-	2	2	2	2	2	2	2	**2**
VIBRIO SPLENDIDUS	**2**	-	-	2	2	2	2	2	1	2	**2**
VIBRIO VULNIFICUS	**1**	2	-	2	2	2	2	2	2	2	**2**
VIBRIO WODANIS	**-**	-	-	2	2	2	2	2	-	2	**2**
VICTIVALLIS	**1**	-	-	1	-	-	-	-	-	-	**1**
VIRGIBACILLUS	**1**	-	1	1	-	-	-	-	-	-	**1**
VIRGISPORANGIUM	**1**	-	-	1	-	-	-	-	-	-	**1**
VIRGOSPORANGIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
VIRIDIBACILLUS	**1**	-	-	-	-	-	-	-	-	-	**1**
VITREOSCILLA	**1**	-	-	1	-	-	-	-	1	-	**1**
VOGESELLA	**1**	-	-	1	-	-	-	-	1	-	**1**
VOLCANIELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
VOLUCRIBACTER AMAZONAE	**2**	-	-	2	-	-	-	-	-	-	**2**
VOLUCRIBACTER PSITTACICIDA	**2**	-	-	2	-	-	-	-	-	-	**2**
VULCANIBACILLUS	**1**	-	-	-	-	-	-	-	-	-	**1**
VULCANITHERMUS	**1**	-	-	1	-	-	-	-	-	-	**1**
WADDLIA CHONDROPHILA	**-**	-	-	2	-	-	-	-	2	-	**2**
WAKSMANIA	**1**	-	-	-	-	-	-	-	-	-	**1**
WANGIA	**1**	-	-	-	-	-	-	-	-	-	**1**
WAUTERSIA PAUCULA	**1**	-	-	2	-	-	-	-	-	-	**1**

WEEKSELLA	1	-	-	1	-	-	-	-	1	-	1
WEISSELLA	1	-	-	1	-	-	-	-	1	-	1
WILLIAMSIA DELIGENS	2	-	-	1	-	-	-	-	-	-	2
WINOGRADSKYELLA	1	-	-	-	-	-	-	-	-	-	1
WOHLFAHRTIIMONAS	1	-	-	-	-	-	-	-	-	-	1
WOLBACHIA	-	-	-	1	-	-	-	-	1	-	1
WOLINELLA	1	-	-	1	-	-	-	-	1	-	1
WOODSHOLEA	1	-	-	1	-	-	-	-	-	-	1
XANTHOBACTER	1	-	-	1	-	-	-	-	1	-	1
XANTHOMONAS ALBILINEANS	2	-	-	1	-	-	-	-	1	-	1
XANTHOMONAS ARBORICOLA	-	-	-	-	-	-	-	-	2	-	2
XANTHOMONAS AXONOPODIS	-	-	-	-	-	-	-	-	2	-	2
XANTHOMONAS CAMPESTRIS	-	-	-	-	-	-	-	-	2	-	2
XANTHOMONAS FRAGARIAE	-	-	-	-	-	-	-	-	2	-	2
XANTHOMONAS TRANSLUCENS	-	-	-	-	-	-	-	-	2	-	2
XANTHOMONAS VESICATORIA	-	-	-	-	-	-	-	-	2	-	2
XENOPHILUS	1	-	-	1	-	-	-	-	-	-	1
XENORHABDUS	1	-	-	1	-	-	-	-	1	-	1
XYLANIBACTER	1	-	-	1	-	-	-	-	-	-	1
XYLANIBACTERIUM	1	-	-	1	-	-	-	-	-	-	1
XYLANIMICROBIUM	1	-	-	1	-	-	-	-	-	-	1
XYLANIMONAS	1	-	-	1	-	-	-	-	-	-	1
XYLELLA FASTIDIOSA	2	-	-	1	-	-	-	-	3	-	2
XYLOPHILUS	1	-	-	1	-	-	-	-	2	-	1
YANIA	1	-	-	1	-	-	-	-	-	-	1
YANIELLA	1	-	-	-	-	-	-	-	-	-	1
YERSINIA ALEKSICIAE	2	-	-	-	2	2	2	2	-	2	2

YERSINIA ENTEROCOLITICA	**2**	2	2	2	2	2	2	2	2	2	**2**
YERSINIA FREDERIKSENII	**2**	2	-	2	2	2	2	2	2	2	**2**
YERSINIA INTERMEDIA	**2**	2	-	2	2	2	2	2	2	2	**2**
YERSINIA KRISTENSENII	**2**	2	2	2	2	2	2	2	2	2	**2**
YERSINIS PESTIS	**-**	3	-	3	3	3	3	3	3	3	**3**
YERSINIA PSEUDOTUBERCULOSIS	**2**	2	-	2	2	2	2	2	2	2	**2**
YERSINIA RUCKERI	**2**	2	1	2	2	3	2	2	2	2	**2**
YERSINIA SIMILIS	**2**	-	-	-	2	2	2	2	-	2	**2**
YOKENELLA REGENSBURGEI	**2**	-	-	-	-	-	-	-	-	-	**2**
YONGHAPARKIA	**1**	-	-	-	-	-	-	-	-	-	**1**
ZAVARZINELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
ZAVARZINIA	**1**	-	-	1	-	-	-	-	1	-	**1**
ZEAXANTHINIBACTER	**1**	-	-	-	-	-	-	-	-	-	**1**
ZHIHENGLIUELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
ZIMMERMANNELLA	**1**	-	-	1	-	-	-	-	-	-	**1**
ZOBELLELLA	**1**	-	-	-	-	-	-	-	-	-	**1**
ZOBELLIA	**1**	-	-	1	-	-	-	-	-	-	**1**
ZOOGLOEA	**1**	-	-	1	-	-	-	-	1	-	**1**
ZOOSHIKELLA	**1**	-	-	1	-	-	-	-	-	-	**1**
ZUNONGWANGIA	**1**	-	-	-	-	-	-	-	-	-	**1**
ZYMOBACTER	**1**	-	-	1	-	-	-	-	1	-	**1**
ZYMOBACTERIUM	**1**	-	-	-	-	-	-	-	-	-	**1**
ZYMOMONAS	**1**	-	-	1	-	-	-	-	1	-	**1**
ZYMOPHILUS	**1**	-	-	1	-	-	-	-	1	-	**1**