A COMPARISON OF THE LABAHMS SCHEME AND THE FELASA RECOMMENDATIONS

1 Introduction

The Laboratory Animal Breeders Accredited Health Monitoring Scheme (LABAHMS), was published in 2000. The British Laboratory Animal Breeders Association (LABA) is a UK organisation and there has never been any requirement for commercial breeders based in continental Europe, to follow a quality control system.

With the FELASA recommendations the situation changed and some LABA members decided to adopt them as they had Europe-wide acceptance. There was no difficulty in this, since LABAHMS allows individual breeders to widen the scope of the basic screening requirements if they so wish. FELASA recommendations, also state "Actual practice may differ from these recommendations in various ways depending on local circumstances, such as research objectives, local prevalence of specific agents and the existence of national monitoring schemes".

LABA decided that the pre-existence of LABAHMS as a monitoring scheme necessitated a comparison with the FELASA recommendations to avoid the possibility of confusion among members of the research community. A full analysis of the two schemes, which aims to show that they are comparable, has been published in *Lab. An. Tech. & Welfare*, 3 149-152 (2004). Those wishing to see a detailed comparison of the screening schedules for each species, please refer to that publication. (Laboratory Animals RSM Press Free Download)

Here we outline the essential similarities and differences.

2 Some Definitions

2.1 Environmental Units

LABAHMS expects screening results to reflect each defined environmentally contained unit and each species within that unit. FELASA uses the term, "Self contained microbiological entity", as the unit for which screening should be done, but there is a wide range of possible interpretations of this term.

2.2 Frequency of Monitoring

This is comparable in both schemes, based on a three month interval with some variation depending on local interpretation.

2.3 Sample Size

FELASA: sample size of 10 animals for all species
LABAHMS: sample size 8 animals

3 Comparable Agents Monitored

3.1 Mice

Under both schemes the range and frequency of agents monitored is comparable. Some differences include:

3.1.1 Hantavirus is included under LABAHMS.

3.1.2 LABAHMS: three monthly screening for *Helicobacter spp*. Limited to *H. Hepaticus* and *H. bilis.* FELASA: annual screen required and the generic description *Helicobacter spp.* is used.

3.1.3 LABAHMS: screening only required for named *Pasteurella spp.*, FELASA: uses the generic term *Pasteurellaceae*, also including other organisms such as *Haemophilus* and *Actinobacillus*.

3.2 Rats

3.2.1 3.1.1, 3.1.2 and 3.1.3 also apply for rat screening schedules.

3.2.2 Lymphocytic choriomeningitis is included in rat viruses under LABAHMS because of the safety implications of a potential zoonosis.

3.2.3 *Leptospira* is omitted under FELASA listings, but is accompanied by a recommendation for inclusion depending on local circumstances. LABAHMS includes *Leptospira* on an annual basis as a human health and safety precaution.

3.3 Hamsters

Screening under both schemes very similar except:

3.3.1 Absence of *Pasteurellaceae* from LABAHMS as they are not considered to have pathogenic significance in immunocompetent animals.

3.3.2 Absence of *Helicobacter spp.* by LABAHMS, as they are not considered to have pathogenic significance in the hamster.

3.3.3 FELASA includes a rabbit pathogen *Encephalitozoon cuniculi* with a separate annual screening requirement under hamster parasite listings. However LABAHMS does not consider this organism to be significant in the hamster.

3.4 Gerbils

FELASA does not include recommendations for gerbils, but LABAHMS does, as listed for hamsters.

3.5 Guinea Pigs

3.5.1 Absence of a number of bacterial and other agents from LABAHMS to take into account part-barrier guinea pigs. There is nothing to prevent the breeder including them if required.

3.5.2 Other organisms are excluded from LABAHMS, as they are rarely found in UK stock.

3.5.3 LABAHMS does not include certain agents (e.g. guinea pig adenovirus) because tests are not considered sufficiently reliable.

3.6 Rabbits

3.6.1 FELASA includes *Pasteurellacae* as a generic group, LABAHMS requires the inclusion of *P. multocida* and *P. pneumotropica*.

3.6.2 LABAHMS includes *Yersinia pseudotuberculosis* in rabbits, whereas FELASA lists it under guinea pigs but not rabbits.

3.6.3 *Myxoma* virus is not included by FELASA, because as an insect borne virus it is highly unlikely to occur in laboratory animal units. However, in some breeder units contact with insect vectors is a possibility and LABAHMS considers its inclusion to be necessary.

3.6.4 LABAHMS does not include rabbit haemorrhagic disease as it is considered that the presence of the virus would produce clinical disease and death. Subclinical disease is therefore highly unlikely to occur. FELASA does include this agent because of the possibility of the presence of antigenically similar conditions which might not produce clinical disease.

4 General Considerations

4.1 Skin dermatophytes are not included under FELASA, except under guinea pigs and rabbits. Although the headings for most species include the words ‘and fungi’ none are listed. Skin dermatophytes are not included under LABAHMS.

4.2 FELASA includes a requirement for pathological lesions to be reported, LABAHMS does not.

5 Conclusions

Comparison of the two screening regimes indicates a close compatibility. Where differences exist, there are either valid reasons for these or the differences are related to a local interpretation of the significance of certain organisms. The use of LABAHMS does not preclude compliance with FELASA since LABAHMS allows for a degree of flexibility and FELASA recognises the need for accommodation to local conditions and pre-existing national schemes.