Ram Buyer Guide:

2023 MERINOSELECT Research Indexes

Overview:

This document is targeted at Ram Buyers that are seeking an overview of the MERINOSELECT Research Indexes and how they can use them.

Contents:

1. How to use indexes to assist in purchasing decisions
2. Introducing the MERINOSELECT research indexes
3. Choosing the right index

1. How to use the chosen index to assist in purchasing decisions

Before the sale:

1. Rank animals in the sale on the value of your chosen index.
2. Consider the individual ASBVs which are important to you to create a short list of rams to look at on sale day.

At the sale:

3. Look through your short list of rams to find the ones that meet your structural and type requirements.

2. Introducing the MERINOSELECT research indexes

There are five MERINOSELECT research indexes, each representing a different breeding objective and production system. The dots in the following table depict the relative trait importance in each of the indexes.

Table 1: MERINOSELECT research indexes.

Trait	Maternal + Lamb	Sustainable Merino	Sustainable Merino - HR	Wool Production	Fine Wool
Clean fleece weight	●●	●●●	●●●	●●●●	●●●
Fibre diameter	●	●	●	●●	●●●
Lamb growth	●●●	●●	●●	●	●
Carcase composition	●●	●	●		
Adult weight	-●	-●	-●		
Worm egg count			●●		●
Reproduction	●●●	●●	●●	●	●
Breech wrinkle	●●	●●	●●	●●	●●
Dag			●●		
Condition score	●●	●	●	●	●

Please note, the negative symbol associated with the Adult Weight trait in the above table is an indication that higher feed costs occur for bigger ewes, and that there is a trade-off that bigger ewes also produce more lambs which reach sale weight faster. In other words, the indexes aim to increase reproduction and lamb growth while limiting increases in mature size.

3. Choosing the right index

The new research MERINOSELECT indexes build upon the existing indexes to meet the changing needs of industry and in turn encapsulate a greater number of traits targeting not only production but also resilience, welfare, and disease. For those using the existing Fibre Production Plus (FP+), Merino Production Plus (MP+) and Dual Purpose Plus (DP+), the flow chart below provides a guide to which of the new indexes is most likely to align with your breeding objective.
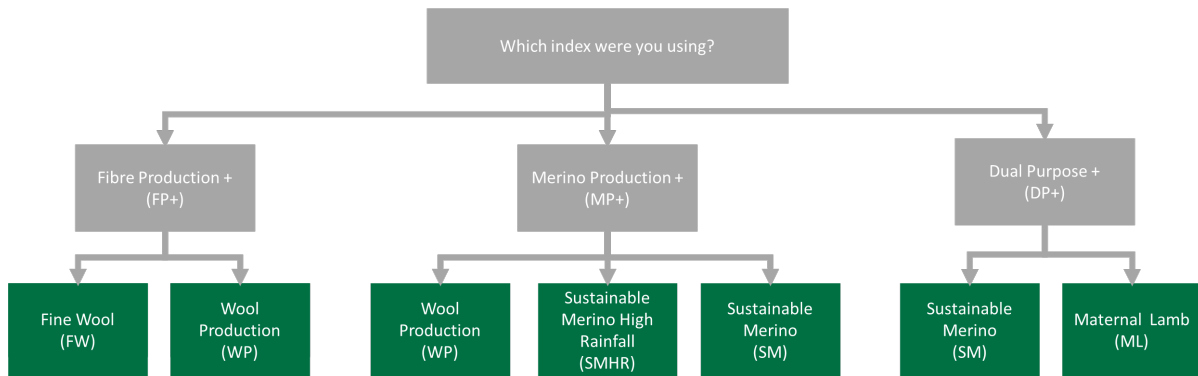
The following figure (figure 1) provides an understanding the relative economic importance of each of the trait groups within the research indexes. The relative economic weighting reflects the economic value relative to genetic variation of each trait, allowing comparison between traits. Some traits may have a large economic value reflecting a substantial impact on profit, but lower genetic variation relative to other traits which can reduce their relative contribution (ewe rearing ability for example). A negative contribution indicates that there is an economic advantage to reduce the trait, for example wrinkle and fibre diameter.

With the new indexes closest to you breeding objective identified, use the below figure to select the most suitable index to your production system based on the traits of interest and importance.
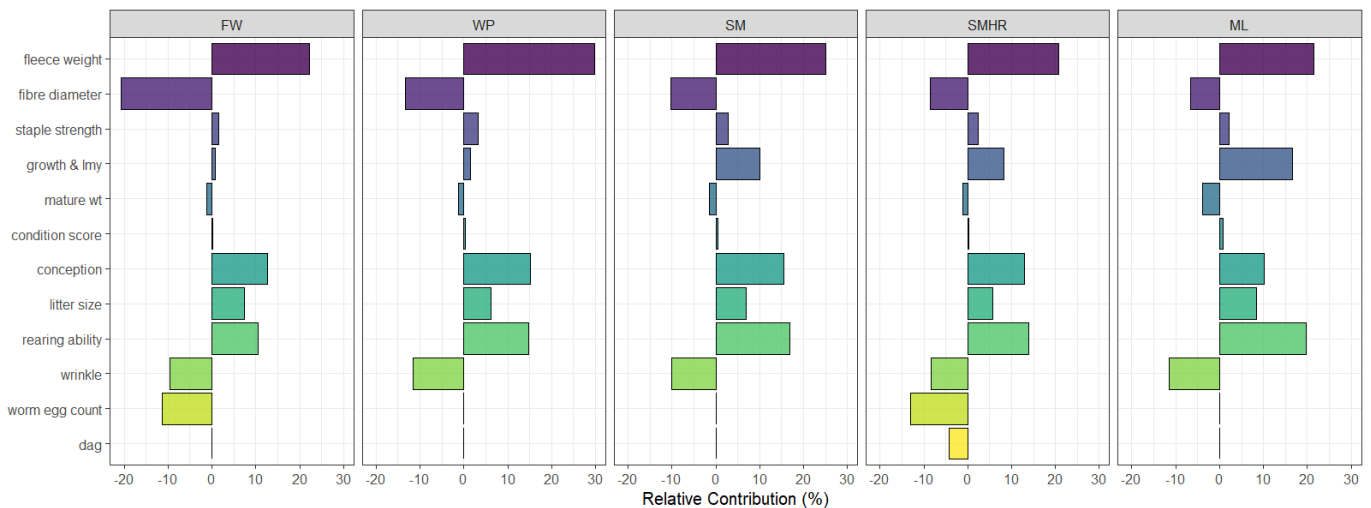
Trait contributions across research indexes

Figure 1: Relative economic weighting of trait groups within the research indexes, Fine Wool (FW), Wool Production (WP), Sustainable Merino (SM), Sustainable Merino High Rainfall (SMHR) and Maternal Lamb (ML).

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