An evaluation on four potential *SLA*s for West Greenland humpback whales using the agreed evaluation and robustness trials

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INTRODUCTION

This paper provides results from the application of the software developed by Punt for the West Greenland humpback whale trials as agreed at the AWMP Intersessional Workshop (IWC, 2014) to four potential *SLA*s.

To facilitate comparison across different *SLA*s in what is an initial analysis only, a summary statistic developed by Brandão and Butterworth (2013) to reflect the improvement in the performance achieved by a candidate *SLA* compared to the extreme of a *Strike Limit = Need* approach was used to select "best performing" *SLA* from the range of *SLA*s that were considered by Brandão and Butterworth (2013), two of which formed part of the 'reference *SLA*s' as given in IWC (2012). Variants of the selected *SLA* were than considered in an attempt to address shortcomings in the performance of that *SLA*.

*SLA*s CONSIDERED

Four *SLA*s are considered in this paper. One of these forms part of the 'reference *SLA*s' as given in IWC (2012) and is included here to facilitate the comparison of the *SLA*s considered, while the three others are variants of another of these 'reference *SLA*s'. A fifth *SLA* which sets the *Strike Limit* equal to need is also considered, but its primary use is to provide a baseline to which to compare the performances of the other *SLA*s and is referred to as *SLA*0.

*SLA*1: Interim *SLA* which sets the *Strike Limit* as the lesser of need and $0.02\hat{N}e^{-1.645CV}$ where $\hat{N}$ is the most recent estimate of abundance and *CV* is the coefficient of variation of $\hat{N}$.

*SLA*2: Weighted-average interim *SLA* which uses all the abundance estimates and replaces $\hat{N}$ and *CV* in *SLA*1 by:

$$\hat{N} = \exp\left[\sum_i \frac{0.95^{t_i}\ln N_i}{CV_i^2} \Bigg/ \sum_i \frac{0.95^{t_i}}{CV_i^2}\right] \quad (1)$$

$$CV = \sqrt{\sum_i \frac{0.95^{2t_i}}{CV_i^2}} \Big/ \sum_i \frac{0.95^{t_i}}{CV_i^2} \qquad (2)$$

where N_i is the ith estimate of abundance, CV_i is the coefficient of variation of N_i, and t_i is the time (in years) between when the ith estimate of abundance was obtained and the first year of the block for which a *Strike Limit* is needed. The downweighting factor which reduces the weight of earlier compared to more recent abundance estimates is 0.95.

*SLA*3: Variant of *SLA*2 described above. This variant adjusts the 0.02 multiplier applied to $\hat{N}$ as in *SLA*1 by a function of the observed trend of the abundance indices, so that the *Strike Limit* is set as the lesser of need and $0.02 f\left(\beta^*\right)\hat{N}e^{-1.645CV}$, where

$$f\left(\beta^*\right) = \alpha + (1-\alpha)\frac{1}{1+e^{\left(\beta^*-\bar{\beta}\right)/\delta}},$$

where

$\beta^* = \hat{\beta} - \lambda s_{\hat{\beta}}$, where $\hat{\beta}$ is the negative of the slope of the log-linear regression applied to the abundance indices, $s_{\hat{\beta}}$ is the standard error of the slope coefficient and λ is a control parameter, and

α, $\bar{\beta}$, and δ are control parameters.

For this variant the following values are chosen for the control parameters:

$\alpha = 0.2, \bar{\beta} = 0.005, \delta = \bar{\beta}/3$, and $\lambda = 2$, which provide "larger" changes in depletion values compared to *SAL*2 so that the resource is not reduced as much by strikes if MSYR is low. The function $f\left(\beta^*\right)$ is only calculated if there are more than three abundance indices; otherwise it is set to 1. Thus this approach allows for additional reduction of the strike limit if the time series of abundances shows a reasonably precise downward trend in abundance.

*SLA*4: Variant of *SLA*3 described above. In this variant the control parameters are set to:

$\alpha = 0.3, \bar{\beta} = 0.02, \delta = \bar{\beta}/5$, and $\lambda = 1$, which provide "lesser" changes in depletion values compared to *SLA*2.

Note that the control parameters for *SLA*3 and *SLA*4 were not "optimised" for humpback whales; rather the same values obtained from the "optimising" exercise done for bowhead whales are used due to a lack of time.

RESULTS AND DISCUSSION

Table 1 gives the lower 5%-ile D1, D10 and N9 statistics for the humpback trials for each of the four *SLA*s considered. *SLA*2 performs well for all evaluation trials but not in a few of the robustness trials in terms of relative increase in population size (those with a 5%-ile D10 value < 1.0, i.e. no recovery, are highlighted in the Table). Note that Appendix A gives details of all the trials and need envelopes considered. Appendix B gives all the results for the more important statistics, as indicated in IWC 2014, for the four *SLA*s.

The *SLA* selected initially from a range of *SLA*s investigated by Brandão and Butterworth (2013) is *SLA*2. This was chosen in preference to alternative downweighting factors of 0.9 and 0.8 primarily because of better performance on need satisfaction. Table 1 reflects that the trials showing the poorest results in terms of the lower 5%-ile D10 statistic include two with a low value of $MSYR_{1+}$ of 3% and a linear increase in *M*. The trials that consider an even lower $MSYR_{1+}$ of 1% combined with the need scenario D (see Appendix B), also show low 5%-ile D10 statistic values. The variants of this *SLA* considered were developed to try to improve on the relative increase in population size for these poor-result trials in particular. However the improvements achieved are not substantial, and come at the expense of need satisfaction for most trials (Table 1 and Figures 1-2).

ACKNOWLEDGMENT

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REFERENCE

Brandao, A. and Butterworth, D.S. 2013. An evaluation on four *SLA*s for West Greenland humpback and bowhead whales using the agreed evaluation and robustness trials. SC/65a/AWMP02.

International Whaling Commission. 2012. Report of the Fourth AWMP Workshop on the Development of *SLA*s for the Greenlandic Hunts.

International Whaling Commission. 2014. Report of the AWMP Intersessional Workshop on Developing *SLA*s for the Greenlandic Hunts.

Table 1. Lower 5%-ile values for final depletion (D1), average need satisfaction (N9) and relative increase of 1+ population size (D10) for West Greenland humpback whales. Results are shown for the four *SLA*s considered. For comparison, results setting catch equal need (*SL*0) are also given. Trials with a 5%-ile D10 value ≤ 1.0 for *SLA*2 are pink highlighted.

a) Evaluation Trials

	D1: Final depletion 1+ pop					N9: 5% Need satfn(100)					D10: Relative increase 1+ pop (5%)				
	SLA0	SLA1	SLA2	SLA3	SLA4	SLA0	SLA1	SLA2	SLA3	SLA4	SLA0	SLA1	SLA2	SLA3	SLA4
GH01AA	0.973	0.973	0.973	0.973	0.973	1.000	1.000	1.000	0.945	1.000	1.490	1.490	1.490	1.490	1.490
GH01AB	0.952	0.952	0.952	0.952	0.952	1.000	1.000	1.000	0.906	1.000	1.460	1.460	1.460	1.460	1.460
GH01AC	0.930	0.932	0.930	0.931	0.930	1.000	0.987	1.000	0.855	1.000	1.450	1.450	1.450	1.450	1.450
GH01AD	0.940	0.940	0.940	0.941	0.940	1.000	0.983	1.000	0.852	1.000	1.450	1.450	1.450	1.450	1.450
GH01BA	0.920	0.927	0.922	0.925	0.924	1.000	0.952	0.993	0.897	0.985	1.910	1.910	1.910	1.910	1.910
GH01BB	0.905	0.908	0.906	0.909	0.906	1.000	0.951	0.993	0.856	0.982	1.880	1.880	1.880	1.880	1.880
GH01BC	0.864	0.865	0.865	0.876	0.865	1.000	0.942	0.987	0.806	0.971	1.850	1.850	1.850	1.850	1.850
GH01BD	0.854	0.880	0.866	0.885	0.875	1.000	0.882	0.948	0.736	0.893	1.860	1.860	1.860	1.860	1.860
GH01CA	0.978	0.980	0.978	0.980	0.978	1.000	1.000	1.000	0.845	1.000	1.120	1.120	1.120	1.120	1.120
GH01CB	0.958	0.964	0.958	0.967	0.963	1.000	0.995	1.000	0.784	1.000	1.110	1.110	1.110	1.110	1.110
GH01CC	0.936	0.952	0.944	0.959	0.948	1.000	0.948	1.000	0.712	0.994	1.080	1.090	1.090	1.090	1.090
GH01CD	0.946	0.958	0.951	0.961	0.954	1.000	0.967	1.000	0.719	1.000	1.100	1.100	1.100	1.100	1.100
GH02AB	0.952	0.952	0.952	0.952	0.952	1.000	1.000	1.000	0.941	1.000	1.460	1.460	1.460	1.460	1.460
GH02AC	0.930	0.931	0.930	0.932	0.930	1.000	0.990	1.000	0.937	1.000	1.450	1.450	1.450	1.450	1.450
GH02AD	0.940	0.940	0.940	0.940	0.940	1.000	0.992	1.000	0.919	1.000	1.450	1.450	1.450	1.450	1.450
GH02BB	0.905	0.907	0.905	0.908	0.908	1.000	0.973	1.000	0.846	0.951	1.880	1.880	1.880	1.880	1.880
GH02BC	0.864	0.866	0.865	0.882	0.871	1.000	0.965	1.000	0.814	0.941	1.850	1.850	1.850	1.850	1.850
GH02BD	0.854	0.879	0.865	0.883	0.880	1.000	0.910	0.973	0.785	0.895	1.860	1.860	1.860	1.860	1.860
GH03AB	0.959	0.959	0.959	0.959	0.959	1.000	1.000	1.000	0.944	1.000	1.470	1.470	1.470	1.470	1.470
GH03AC	0.941	0.942	0.941	0.941	0.941	1.000	0.998	1.000	0.867	1.000	1.450	1.450	1.450	1.450	1.450
GH03BB	0.906	0.909	0.906	0.906	0.906	1.000	0.975	1.000	0.899	0.993	1.890	1.890	1.890	1.890	1.890
GH03BC	0.869	0.874	0.874	0.877	0.874	1.000	0.968	0.994	0.871	0.985	1.860	1.860	1.860	1.860	1.860
GH04AB	0.958	0.958	0.958	0.963	0.958	1.000	1.000	1.000	0.922	1.000	1.350	1.350	1.350	1.380	1.350
GH04AC	0.938	0.946	0.938	0.951	0.938	1.000	0.987	1.000	0.868	1.000	1.320	1.340	1.320	1.370	1.330
GH04AD	0.948	0.950	0.948	0.956	0.948	1.000	0.967	1.000	0.874	0.998	1.330	1.350	1.330	1.380	1.330
GH04BB	0.899	0.913	0.899	0.932	0.908	1.000	0.957	0.998	0.887	0.989	1.710	1.710	1.710	1.710	1.710
GH04BC	0.853	0.896	0.894	0.902	0.901	1.000	0.944	0.994	0.850	0.984	1.620	1.660	1.630	1.660	1.650
GH04BD	0.867	0.900	0.894	0.914	0.896	1.000	0.922	0.964	0.803	0.947	1.660	1.680	1.660	1.680	1.670
GH05AB	0.934	0.947	0.934	0.955	0.947	1.000	0.978	1.000	0.746	1.000	1.500	1.500	1.500	1.500	1.500
GH05AC	0.901	0.933	0.922	0.947	0.925	1.000	0.964	1.000	0.709	0.993	1.490	1.490	1.490	1.490	1.490
GH05AD	0.916	0.939	0.926	0.947	0.934	1.000	0.936	0.993	0.703	0.974	1.490	1.490	1.490	1.490	1.490
GH05BB	0.885	0.898	0.886	0.903	0.897	1.000	0.953	0.998	0.818	0.972	2.090	2.090	2.090	2.090	2.090
GH05BC	0.840	0.872	0.851	0.876	0.858	1.000	0.948	0.986	0.741	0.962	2.040	2.040	2.040	2.040	2.040
GH05BD	0.848	0.874	0.862	0.885	0.868	1.000	0.897	0.948	0.707	0.908	2.060	2.060	2.060	2.060	2.060
GH06AB	1.004	1.004	1.004	1.004	1.004	1.000	1.000	1.000	0.895	1.000	1.530	1.530	1.530	1.530	1.530
GH06AC	0.984	0.986	0.984	0.986	0.984	1.000	0.989	1.000	0.828	1.000	1.510	1.510	1.510	1.510	1.510
GH06AD	0.994	0.994	0.994	0.994	0.994	1.000	0.979	1.000	0.806	1.000	1.520	1.520	1.520	1.520	1.520
GH06BB	0.996	0.996	0.996	0.996	0.996	1.000	0.937	0.988	0.807	0.968	2.030	2.030	2.030	2.030	2.030
GH06BC	0.958	0.963	0.962	0.968	0.962	1.000	0.930	0.980	0.766	0.941	2.000	2.000	2.000	2.000	2.000
GH06BD	0.922	0.975	0.971	0.976	0.975	1.000	0.888	0.931	0.719	0.902	2.010	2.010	2.010	2.010	2.010
GH07AB	0.921	0.921	0.921	0.921	0.921	1.000	1.000	1.000	0.903	1.000	1.410	1.410	1.410	1.410	1.410
GH07AC	0.897	0.899	0.897	0.899	0.897	1.000	0.987	1.000	0.842	1.000	1.390	1.390	1.390	1.390	1.390
GH07AD	0.908	0.909	0.908	0.909	0.908	1.000	0.983	1.000	0.837	1.000	1.390	1.390	1.390	1.390	1.390
GH07BB	0.878	0.879	0.878	0.881	0.879	1.000	0.952	0.996	0.854	0.985	1.810	1.810	1.810	1.810	1.810
GH07BC	0.836	0.844	0.844	0.849	0.844	1.000	0.949	0.993	0.805	0.981	1.770	1.770	1.770	1.770	1.770
GH07BD	0.833	0.852	0.843	0.857	0.850	1.000	0.887	0.954	0.759	0.908	1.790	1.790	1.790	1.790	1.790
GH08AB	0.935	0.935	0.935	0.936	0.935	1.000	1.000	1.000	0.934	1.000	1.590	1.590	1.590	1.600	1.590
GH08AC	0.916	0.923	0.919	0.929	0.919	1.000	1.000	1.000	0.913	1.000	1.560	1.570	1.560	1.580	1.560
GH08AD	0.921	0.929	0.926	0.932	0.926	1.000	0.996	1.000	0.900	1.000	1.580	1.580	1.580	1.590	1.580
GH08BB	0.862	0.869	0.862	0.872	0.864	1.000	0.970	1.000	0.732	0.972	1.590	1.590	1.590	1.650	1.590
GH08BC	0.838	0.847	0.839	0.852	0.841	1.000	0.932	0.991	0.679	0.950	1.540	1.550	1.540	1.650	1.540
GH08BD	0.848	0.848	0.848	0.862	0.848	1.000	0.926	0.976	0.677	0.933	1.560	1.560	1.560	1.650	1.560

Table 1cont. Lower 5%-ile values for final depletion (D1), average need satisfaction (N9) and relative increase of 1+ population size (D10) for West Greenland humpback whales. Results are shown for the four *SLA*s considered. For comparison, results setting catch equal need (*SL*0) is also given. Trials with a 5%-ile D10 value ≤ 1.0 for *SLA*2 are pink highlighted.

b) Robustness Trials

	D1: Final depletion 1+ pop					N9: 5% Need satfn(100)					D10: Relative increase 1+ pop (5%)				
	SLA0	SLA1	SLA2	SLA3	SLA4	SLA0	SLA1	SLA2	SLA3	SLA4	SLA0	SLA1	SLA2	SLA3	SLA4
GH21AB	0.486	0.491	0.486	0.500	0.486	1.000	0.967	1.000	0.733	1.000	0.750	0.760	0.750	0.780	0.750
GH21AD	0.475	0.488	0.476	0.495	0.479	1.000	0.926	1.000	0.647	0.980	0.750	0.750	0.750	0.780	0.750
GH21BB	0.485	0.493	0.492	0.494	0.493	1.000	0.945	0.992	0.765	0.978	1.000	1.000	1.000	1.020	1.000
GH21BD	0.466	0.480	0.477	0.482	0.478	1.000	0.877	0.942	0.699	0.889	0.990	0.990	0.990	1.020	0.990
GH22AB	0.272	0.277	0.272	0.292	0.272	1.000	0.992	1.000	0.758	1.000	0.680	0.690	0.680	0.750	0.680
GH22AD	0.263	0.263	0.263	0.287	0.263	1.000	0.956	1.000	0.705	0.979	0.600	0.670	0.600	0.720	0.640
GH22BB	0.000	0.020	0.007	0.024	0.017	1.000	0.828	0.956	0.528	0.779	0.000	0.120	0.030	0.220	0.120
GH22BD	0.000	0.017	0.000	0.020	0.010	1.000	0.673	0.826	0.474	0.648	0.000	0.110	0.000	0.190	0.080
GH23AB	0.952	0.952	0.952	0.952	0.952	1.000	1.000	1.000	0.912	1.000	1.460	1.460	1.460	1.470	1.460
GH23AD	0.940	0.940	0.940	0.941	0.940	1.000	0.996	1.000	0.864	1.000	1.450	1.450	1.450	1.470	1.450
GH23BB	0.905	0.908	0.905	0.909	0.906	1.000	0.971	1.000	0.845	0.963	1.880	1.880	1.880	1.880	1.880
GH23BD	0.854	0.877	0.866	0.885	0.875	1.000	0.923	0.959	0.782	0.893	1.860	1.860	1.860	1.860	1.860
GH24AB	0.951	0.951	0.951	0.957	0.951	1.000	0.989	1.000	0.859	1.000	1.450	1.470	1.450	1.520	1.460
GH24AD	0.938	0.940	0.938	0.947	0.938	1.000	0.951	0.990	0.787	0.968	1.420	1.460	1.420	1.510	1.450
GH24BB	0.889	0.889	0.889	0.916	0.889	1.000	0.982	1.000	0.799	0.985	1.700	1.700	1.700	1.700	1.700
GH24BD	0.842	0.880	0.850	0.897	0.862	1.000	0.925	0.965	0.741	0.936	1.680	1.680	1.680	1.680	1.680
GH24CB	0.942	0.955	0.944	0.960	0.947	1.000	0.935	1.000	0.570	0.974	1.120	1.160	1.150	1.160	1.160
GH24CD	0.926	0.950	0.940	0.958	0.944	1.000	0.845	0.963	0.514	0.913	1.100	1.150	1.140	1.160	1.150
GH25DB	0.000	0.057	0.036	0.097	0.061	1.000	0.563	0.643	0.374	0.544	0.000	0.980	0.630	1.290	0.950
GH25DD	0.000	0.050	0.024	0.086	0.051	1.000	0.408	0.465	0.268	0.391	0.000	0.810	0.410	1.180	0.670
GH26AB	0.958	0.958	0.958	0.958	0.958	1.000	1.000	1.000	0.959	1.000	1.840	1.840	1.840	1.840	1.840
GH26AD	0.947	0.947	0.947	0.950	0.947	1.000	0.972	0.994	0.918	0.989	1.820	1.820	1.820	1.820	1.820
GH26BB	0.871	0.884	0.871	0.911	0.871	1.000	0.955	1.000	0.831	0.977	1.940	1.940	1.940	1.940	1.940
GH26BD	0.815	0.861	0.820	0.886	0.842	1.000	0.909	0.960	0.730	0.939	1.880	1.910	1.880	1.910	1.890
GH27AB	0.916	0.916	0.916	0.916	0.916	1.000	1.000	1.000	0.909	1.000	1.460	1.460	1.460	1.460	1.460
GH27AD	0.910	0.910	0.910	0.910	0.910	1.000	0.979	0.998	0.872	0.989	1.460	1.460	1.460	1.460	1.460
GH27BB	0.851	0.857	0.851	0.857	0.851	1.000	0.983	1.000	0.862	1.000	1.920	1.930	1.920	1.940	1.920
GH27BD	0.844	0.847	0.844	0.847	0.844	1.000	0.924	0.978	0.766	0.967	1.880	1.880	1.880	1.920	1.880
GH28AB	0.931	0.931	0.931	0.931	0.931	1.000	1.000	1.000	0.912	1.000	1.490	1.490	1.490	1.490	1.490
GH28AD	0.913	0.928	0.920	0.926	0.920	1.000	0.975	1.000	0.879	0.994	1.480	1.480	1.480	1.480	1.480
GH28BB	0.888	0.893	0.888	0.893	0.891	1.000	0.966	1.000	0.870	0.983	1.600	1.600	1.600	1.600	1.600
GH28BD	0.838	0.879	0.844	0.885	0.852	1.000	0.894	0.969	0.776	0.950	1.560	1.560	1.560	1.570	1.560

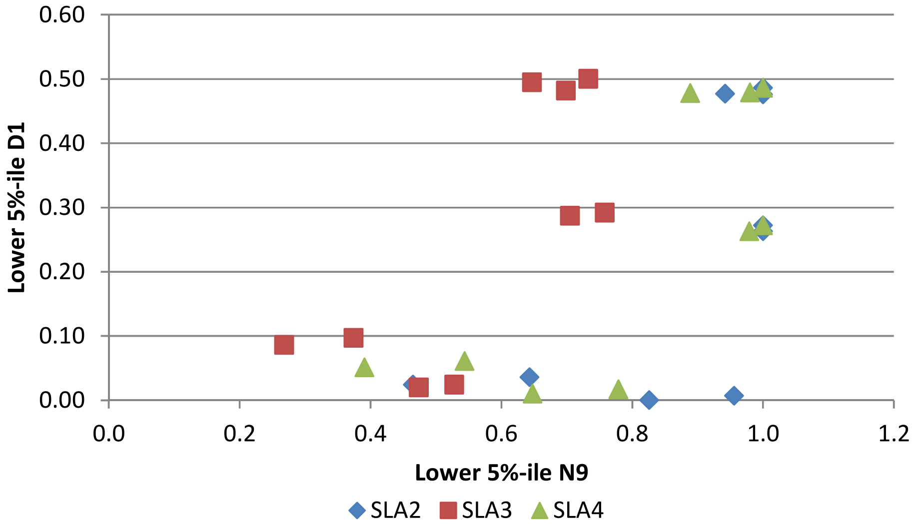

Figure 1. Plot of the lower 5%-ile average need satisfaction (N9) against the lower 5%-ile final depletion (D1) for three potential *SLA*s (*SLA*2, *SLA*3 and *SLA*4) for West Greenland bowhead whales for all of the highlighted trials in Table 1. Note that achieving less population reduction under poor recovery result scenarios, some need satisfaction has to be sacrificed.

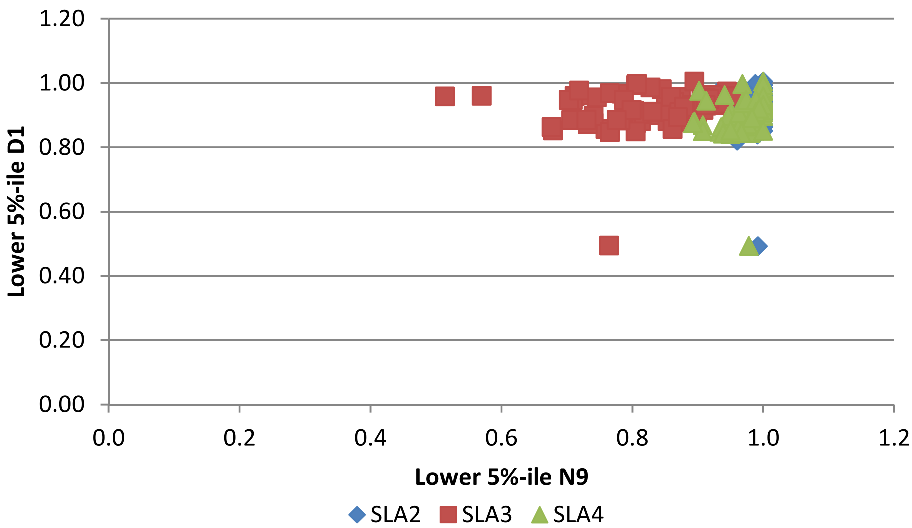

Figure 2. Plot of the lower 5%-ile average need satisfaction (N9) against the lower 5%-ile final depletion (D1) for three potential *SLA*s (*SLA*2, *SLA*3 and *SLA*4) for West Greenland bowhead whales for all of the non-highlighted trials in Table 1. Note here that achieving better recovery for some poor recovery result trials (see Figure 1) leads to some loss of need satisfaction for trials for which recovery seems adequate under *SLA*2.

APPENDIX A

List of evaluation and robustness trials (see IWC, 2014, Table 5 and 6 of Annex D)

a) Evaluation trials for humpback whales

Trial	Description	Conditioning
GH01AA	$MSYR_{1+}$ = 5%; need scenario A; survey frequency = 10; historic survey bias = 1	Yes [1A]
GH01AB	$MSYR_{1+}$ = 5%; need scenario B; survey frequency = 10; historic survey bias = 1	1A
GH01AC	$MSYR_{1+}$ = 5%; need scenario C; survey frequency = 10; historic survey bias = 1	1A
GH01AD	$MSYR_{1+}$ = 5%; need scenario D; survey frequency = 10; historic survey bias = 1	1A
GH01BA	$MSYR_{1+}$ = 3%; need scenario A; survey frequency = 10; historic survey bias = 1	Yes [1B]
GH01BB	$MSYR_{1+}$ = 3%; need scenario B; survey frequency = 10; historic survey bias = 1	1B
GH01BC	$MSYR_{1+}$ = 3%; need scenario C; survey frequency = 10; historic survey bias = 1	1B
GH01BD	$MSYR_{1+}$ = 3%; need scenario D; survey frequency = 10; historic survey bias = 1	1B
GH01CA	$MSYR_{1+}$ = 7%; need scenario A; survey frequency = 10; historic survey bias = 1	Yes [1C]
GH01CB	$MSYR_{1+}$ = 7%; need scenario B; survey frequency = 10; historic survey bias = 1	1C
GH01CC	$MSYR_{1+}$ = 7%; need scenario C; survey frequency = 10; historic survey bias = 1	1C
GH01CD	$MSYR_{1+}$ = 7%; need scenario D; survey frequency = 10; historic survey bias = 1	1C
GH02AB	$MSYR_{1+}$ = 5%; need scenario B; survey frequency = 5; historic survey bias = 1	1A
GH02AC	$MSYR_{1+}$ = 5%; need scenario C; survey frequency = 5; historic survey bias = 1	1A
GH02AD	$MSYR_{1+}$ = 5%; need scenario D; survey frequency = 5; historic survey bias = 1	1A
GH02BB	$MSYR_{1+}$ = 3%; need scenario B; survey frequency = 5; historic survey bias = 1	1B
GH02BC	$MSYR_{1+}$ = 3%; need scenario C; survey frequency = 5; historic survey bias = 1	1B
GH02BD	$MSYR_{1+}$ = 3%; need scenario D; survey frequency = 5; historic survey bias = 1	1B
GH03AB	$MSYR_{1+}$ = 5%; need scenario B; survey frequency = 15; historic survey bias = 1	1A
GH03AC	$MSYR_{1+}$ = 5%; need scenario C; survey frequency = 15; historic survey bias = 1	1A
GH03BB	$MSYR_{1+}$ = 3%; need scenario B; survey frequency = 15; historic survey bias = 1	1B
GH03BC	$MSYR_{1+}$ = 3%; need scenario C; survey frequency = 15; historic survey bias = 1	1B
GH04AB	$MSYR_{1+}$ = 5%; need scenario B; survey frequency = 10; historic survey bias = 0.8	Yes [4A]
GH04AC	$MSYR_{1+}$ = 5%; need scenario C; survey frequency = 10; historic survey bias = 0.8	4A
GH04AD	$MSYR_{1+}$ = 5%; need scenario D; survey frequency = 10; historic survey bias = 0.8	4A
GH04BB	$MSYR_{1+}$ = 3%; need scenario B; survey frequency = 10; historic survey bias = 0.8	Yes [4B]
GH04BC	$MSYR_{1+}$ = 3%; need scenario C; survey frequency = 10; historic survey bias = 0.8	4B
GH04BD	$MSYR_{1+}$ = 3%; need scenario D; survey frequency = 10; historic survey bias = 0.8	4B
GH05AB	$MSYR_{1+}$ = 5%; need scenario B; survey frequency = 10; historic survey bias = 1.2	Yes [5A]
GH05AC	$MSYR_{1+}$ = 5%; need scenario C; survey frequency = 10; historic survey bias = 1.2	5A
GH05AD	$MSYR_{1+}$ = 5%; need scenario D; survey frequency = 10; historic survey bias = 1.2	5A
GH05BB	$MSYR_{1+}$ = 3%; need scenario B; survey frequency = 10; historic survey bias = 1.2	Yes [5B]
GH05BC	$MSYR_{1+}$ = 3%; need scenario C; survey frequency = 10; historic survey bias = 1.2	5B
GH05BD	$MSYR_{1+}$ = 3%; need scenario D; survey frequency = 10; historic survey bias = 1.2	5B
GH06AB	$MSYR_{1+}$ = 5%; need scenario B; survey frequency = 10; historic survey bias = 1; 3 episodic events	1A
GH06AC	$MSYR_{1+}$ = 5%; need scenario C; survey frequency = 10; historic survey bias = 1; 3 episodic events	1A
GH06AD	$MSYR_{1+}$ = 5%; need scenario D; survey frequency = 10; historic survey bias = 1; 3 episodic events	1A

GH06BB	$MSYR_{1+}$ = 3%; need scenario B; survey frequency = 10; historic survey bias = 1; 3 episodic events	1B
GH06BC	$MSYR_{1+}$ = 3%; need scenario B; survey frequency = 10; historic survey bias = 1; 3 episodic events	1B
GH06BD	$MSYR_{1+}$ = 3%; need scenario D; survey frequency = 10; historic survey bias = 1; 3 episodic events	1B
GH07AB	$MSYR_{1+}$ = 5%; need scenario B; survey frequency = 10; historic survey bias = 1; stochastic events every 5 years	1A
GH07AC	$MSYR_{1+}$ = 5%; need scenario C; survey frequency = 10; historic survey bias = 1; stochastic events every 5 years	1A
GH07AD	$MSYR_{1+}$ = 5%; need scenario D; survey frequency = 10; historic survey bias = 1; stochastic events every 5 years	1A
GH07BB	$MSYR_{1+}$ = 3%; need scenario B; survey frequency = 10; historic survey bias = 1; stochastic events every 5 years	1B
GH07BC	$MSYR_{1+}$ = 3%; need scenario B; survey frequency = 10; historic survey bias = 1; stochastic events every 5 years	1B
GH07BD	$MSYR_{1+}$ = 3%; need scenario D; survey frequency = 10; historic survey bias = 1; stochastic events every 5 years	1B
GH08AB	$MSYR_{1+}$ = 5%; need scenario B; survey frequency = 10; historic survey bias = 1; asymmetric environmental stochasticity (depletion = 0.3)	Yes [1A, 8A]
GH08AC	$MSYR_{1+}$ = 5%; need scenario C; survey frequency = 10; historic survey bias = 1; asymmetric environmental stochasticity (depletion = 0.3)	8A
GH08AD	$MSYR_{1+}$ = 5%; need scenario D; survey frequency = 10; historic survey bias = 1; asymmetric environmental stochasticity (depletion = 0.3)	8A
GH08BB	$MSYR_{1+}$ = 3%; need scenario B; survey frequency = 10; historic survey bias = 1; asymmetric environmental stochasticity (depletion = 0.3)	Yes [1B,8B]
GH08BC	$MSYR_{1+}$ = 3%; need scenario C; survey frequency = 10; historic survey bias = 1; asymmetric environmental stochasticity (depletion = 0.3)	8B
GH08BD	$MSYR_{1+}$ = 3%; need scenario D; survey frequency = 10; historic survey bias = 1; asymmetric environmental stochasticity (depletion = 0.3)	8B

b) Robustness trials for humpback whales

Trial	Description	Conditioning
GH21AB	Linear decrease in *K*; $MSYR_{1+}$ = 5%; need scenario B	1A
GH21AD	Linear decrease in *K*; $MSYR_{1+}$ = 5%; need scenario D	1A
GH21BB	Linear decrease in *K*; $MSYR_{1+}$ = 3%; need scenario B	1B
GH21BD	Linear decrease in *K*; $MSYR_{1+}$ = 3%; need scenario D	1B
GH22AB	Linear increase in *M*; $MSYR_{1+}$ = 5%; need scenario B	1A
GH22AD	Linear increase in *M*; $MSYR_{1+}$ = 5%; need scenario D	1A
GH22BB	Linear increase in *M*; $MSYR_{1+}$ = 3%; need scenario B	1B
GH22BD	Linear increase in *M*; $MSYR_{1+}$ = 3%; need scenario D	1B
GH23AB	Strategic surveys; $MSYR_{1+}$ = 5%; need scenario B	1A
GH23AD	Strategic surveys; $MSYR_{1+}$ = 5%; need scenario D	1A
GH23BB	Strategic surveys; $MSYR_{1+}$ = 3%; need scenario B	1B
GH23BD	Strategic surveys; $MSYR_{1+}$ = 3%; need scenario D	1B
GH24AB	Alternative priors; $MSYR_{1+}$ = 5%; need scenario B	Yes [4A*]

GH24AD	Alternative priors; $MSYR_{1+}$ = 5%; need scenario D	4A*
GH24BB	Alternative priors; $MSYR_{1+}$ = 3%; need scenario B	Yes [4B*]
GH24BD	Alternative priors; $MSYR_{1+}$ = 3%; need scenario D	4B*
GH24CB	Alternative priors; $MSYR_{1+}$ = 7%; need scenario B	Yes [4C*]
GH24CD	Alternative priors; $MSYR_{1+}$ = 7%; need scenario D	4C*
GH25DB	$MSYR_{1+}$ = 1%; need scenario B	Yes [5D*]
GH25DD	$MSYR_{1+}$ = 1%; need scenario D	5D*
GH26AB	Include mark-recapture estimates in the conditioning; $MSYR_{1+}$ = 5%; need scenario B	Yes [6A*]
GH26AD	Include mark-recapture estimates in the conditioning; $MSYR_{1+}$ = 5%; need scenario D	6A*
GH26BB	Include mark-recapture estimates in the conditioning; $MSYR_{1+}$ = 3%; need scenario B	Yes [6B*]
GH26BD	Include mark-recapture estimates in the conditioning; $MSYR_{1+}$ = 3%; need scenario D	6B*
GH27AB	$MSYR_{1+}$ = 5%; need scenario B; survey frequency = 10; historic survey bias = 1; asymmetric environmental stochasticity (depletion = 0.15)	Yes [1A,7A*]
GH27AD	$MSYR_{1+}$ = 5%; need scenario D; survey frequency = 10; historic survey bias = 1; asymmetric environmental stochasticity (depletion = 0.15)	7A*
GH27BB	$MSYR_{1+}$ = 3%; need scenario B; survey frequency = 10; historic survey bias = 1; asymmetric environmental stochasticity (depletion = 0.15)	Yes [1B,7B*]
GH27BD	$MSYR_{1+}$ = 3%; need scenario D; survey frequency = 10; historic survey bias = 1; asymmetric environmental stochasticity (depletion = 0.15)	7B*
GH28AB	$MSYR_{1+}$ = 5%; need scenario B; survey frequency = 10; historic survey bias = 1; asymmetric environmental stochasticity (depletion = 0.6)	Yes [1A,8A*]
GH28AD	$MSYR_{1+}$ = 5%; need scenario D; survey frequency = 10; historic survey bias = 1; asymmetric environmental stochasticity (depletion = 0.6)	8A*
GH28BB	$MSYR_{1+}$ = 3%; need scenario B; survey frequency = 10; historic survey bias = 1; asymmetric environmental stochasticity (depletion = 0.6)	Yes [1B,8B*]
GH28BD	$MSYR_{1+}$ = 3%; need scenario D; survey frequency = 10; historic survey bias = 1; asymmetric environmental stochasticity (depletion = 0.6)	8B*

Description of the different need scenarios (see IWC, 2014, Table 4 of Annex D) for humpback whales

Need scenario	Description
Humpback whales	
A	Need envelop: [10, 15, 20–>20 over years 17–100]
B	Need envelop: [10, 15, 20–>40 over years 17–100]
C	Need envelop: [10, 15, 20–>60 over years 17–100]
D	Need envelop: [20, 25, 30, 30–>50 over years 17–100]

APPENDIX B

Further *SLA* results

Table B.1. The more important statistics for *SLA*1 (interim *SLA*). Robustness trials are yellow highlighted.

	D1: Final depletion 1+ pop			D1: Final depletion F pop			D8(0): Scaled Final 1+ pop size			D8(inc): Scaled Final 1+ pop size			D9: min mat fem pop level			D10:Relative increase 1+ pop			N9: Need satfn(20)			N9: Need satfn(100)			N12: Mean downstep		
	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%
GH01AA	0.97	0.99	0.99	0.94	0.98	0.99	0.97	0.99	0.99	0.98	0.99	1.00	482	1017	2056	1.49	4.54	9.78	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH01AB	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.96	0.99	0.99	482	1017	2056	1.46	4.51	9.75	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH01AC	0.93	0.98	0.99	0.86	0.95	0.97	0.93	0.98	0.99	0.94	0.98	0.99	482	1017	2056	1.45	4.49	9.72	1.00	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH01AD	0.94	0.98	0.99	0.88	0.96	0.98	0.94	0.98	0.99	0.95	0.98	0.99	482	1017	2056	1.45	4.50	9.73	1.00	1.00	1.00	0.98	1.00	1.00	0.00	0.00	0.00
GH01BA	0.93	0.97	0.99	0.87	0.95	0.98	0.94	0.98	0.99	0.96	0.99	0.99	303	789	1796	1.91	5.73	16.92	0.75	1.00	1.00	0.95	1.00	1.00	0.00	0.00	0.00
GH01BB	0.91	0.96	0.98	0.84	0.93	0.97	0.91	0.97	0.98	0.93	0.98	0.99	303	789	1796	1.88	5.67	16.66	0.75	1.00	1.00	0.95	1.00	1.00	0.00	0.00	0.01
GH01BC	0.87	0.95	0.98	0.79	0.92	0.95	0.88	0.96	0.98	0.90	0.97	0.98	303	789	1796	1.85	5.58	16.38	0.75	1.00	1.00	0.94	1.00	1.00	0.00	0.00	0.01
GH01BD	0.88	0.96	0.98	0.79	0.92	0.96	0.88	0.96	0.98	0.90	0.97	0.98	303	789	1796	1.86	5.60	16.28	0.59	1.00	1.00	0.88	1.00	1.00	0.00	0.00	0.02
GH01CA	0.98	0.99	1.00	0.96	0.98	0.99	0.98	0.99	1.00	0.98	1.00	1.00	715	1276	2666	1.12	3.12	7.33	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH01CB	0.96	0.99	0.99	0.93	0.97	0.98	0.96	0.99	0.99	0.97	0.99	1.00	715	1276	2666	1.11	3.10	7.31	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH01CC	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.95	0.99	0.99	715	1276	2666	1.09	3.08	7.29	1.00	1.00	1.00	0.95	1.00	1.00	0.00	0.00	0.02
GH01CD	0.96	0.99	0.99	0.91	0.97	0.98	0.96	0.99	0.99	0.96	0.99	0.99	715	1276	2666	1.10	3.09	7.29	1.00	1.00	1.00	0.97	1.00	1.00	0.00	0.00	0.02
GH02AB	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.96	0.99	0.99	482	1017	2056	1.46	4.51	9.75	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH02AC	0.93	0.98	0.99	0.86	0.95	0.97	0.93	0.98	0.99	0.94	0.98	0.99	482	1017	2056	1.45	4.49	9.72	1.00	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH02AD	0.94	0.98	0.99	0.88	0.96	0.98	0.94	0.98	0.99	0.95	0.98	0.99	482	1017	2056	1.45	4.50	9.73	1.00	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH02BB	0.91	0.96	0.98	0.84	0.93	0.97	0.91	0.97	0.98	0.93	0.98	0.99	303	789	1796	1.88	5.67	16.59	0.90	1.00	1.00	0.97	1.00	1.00	0.00	0.00	0.01
GH02BC	0.87	0.95	0.98	0.79	0.92	0.95	0.88	0.96	0.98	0.90	0.97	0.98	303	789	1796	1.85	5.58	16.29	0.90	1.00	1.00	0.97	1.00	1.00	0.00	0.00	0.01
GH02BD	0.88	0.96	0.98	0.79	0.92	0.96	0.88	0.96	0.98	0.89	0.97	0.98	303	789	1796	1.86	5.60	16.14	0.81	1.00	1.00	0.91	1.00	1.00	0.00	0.00	0.04
GH03AB	0.96	0.99	0.99	0.91	0.97	0.98	0.96	0.99	0.99	0.97	0.99	0.99	482	1017	2056	1.47	4.52	9.76	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH03AC	0.94	0.98	0.99	0.87	0.96	0.98	0.94	0.98	0.99	0.95	0.99	0.99	482	1017	2056	1.45	4.50	9.73	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH03BB	0.91	0.97	0.98	0.84	0.93	0.97	0.92	0.97	0.98	0.94	0.98	0.99	303	789	1796	1.89	5.68	16.59	0.99	1.00	1.00	0.98	1.00	1.00	0.00	0.00	0.00
GH03BC	0.87	0.96	0.98	0.80	0.92	0.96	0.89	0.96	0.98	0.91	0.97	0.98	303	789	1796	1.86	5.59	16.31	0.99	1.00	1.00	0.97	1.00	1.00	0.00	0.00	0.00
GH04AB	0.96	0.99	0.99	0.92	0.97	0.98	0.96	0.99	0.99	0.96	0.99	0.99	607	1434	2723	1.35	3.46	8.66	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH04AC	0.95	0.98	0.99	0.89	0.96	0.97	0.95	0.98	0.99	0.95	0.98	0.99	607	1434	2723	1.34	3.44	8.61	1.00	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH04AD	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.95	0.99	0.99	607	1434	2723	1.35	3.45	8.63	0.96	1.00	1.00	0.97	1.00	1.00	0.00	0.00	0.00
GH04BB	0.91	0.97	0.98	0.87	0.94	0.97	0.91	0.97	0.98	0.93	0.98	0.99	423	989	1961	1.71	4.05	11.31	0.95	1.00	1.00	0.96	1.00	1.00	0.00	0.00	0.01
GH04BC	0.90	0.96	0.98	0.85	0.92	0.96	0.90	0.96	0.98	0.91	0.97	0.98	423	989	1961	1.66	4.01	11.16	0.95	1.00	1.00	0.94	1.00	1.00	0.00	0.00	0.03
GH04BD	0.90	0.96	0.98	0.85	0.93	0.96	0.90	0.96	0.98	0.91	0.97	0.98	423	989	1961	1.68	4.03	11.17	0.74	1.00	1.00	0.92	1.00	1.00	0.00	0.00	0.03
GH05AB	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.95	0.99	0.99	466	980	2305	1.50	4.58	11.49	1.00	1.00	1.00	0.98	1.00	1.00	0.00	0.00	0.00
GH05AC	0.93	0.98	0.99	0.88	0.95	0.97	0.93	0.98	0.99	0.94	0.98	0.99	466	980	2305	1.49	4.56	11.44	1.00	1.00	1.00	0.96	1.00	1.00	0.00	0.00	0.03
GH05AD	0.94	0.98	0.99	0.89	0.96	0.98	0.94	0.98	0.99	0.94	0.98	0.99	466	980	2305	1.49	4.57	11.46	0.95	1.00	1.00	0.94	1.00	1.00	0.00	0.00	0.03
GH05BB	0.90	0.96	0.98	0.84	0.93	0.96	0.90	0.96	0.98	0.92	0.97	0.99	360	676	1475	2.09	6.02	14.04	0.90	1.00	1.00	0.95	1.00	1.00	0.00	0.00	0.02
GH05BC	0.87	0.95	0.97	0.80	0.90	0.95	0.88	0.95	0.97	0.89	0.96	0.98	360	676	1475	2.04	5.95	13.85	0.90	1.00	1.00	0.95	1.00	1.00	0.00	0.00	0.02
GH05BD	0.87	0.95	0.97	0.81	0.91	0.95	0.87	0.95	0.97	0.90	0.96	0.98	360	676	1475	2.06	5.97	13.65	0.66	1.00	1.00	0.90	1.00	1.00	0.00	0.00	0.03
GH06AB	1.00	1.03	1.04	1.01	1.07	1.09	0.96	0.99	0.99	0.97	0.99	0.99	486	1023	2071	1.53	4.69	10.06	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH06AC	0.99	1.03	1.04	0.97	1.06	1.08	0.94	0.98	0.99	0.95	0.99	0.99	486	1023	2071	1.51	4.67	10.02	1.00	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH06AD	0.99	1.03	1.04	0.99	1.06	1.08	0.95	0.98	0.99	0.96	0.99	0.99	486	1018	2071	1.52	4.68	10.04	0.97	1.00	1.00	0.98	1.00	1.00	0.00	0.00	0.01
GH06BB	1.00	1.05	1.06	0.98	1.08	1.14	0.93	0.98	0.99	0.94	0.98	0.99	303	796	1711	2.03	6.10	18.26	0.76	1.00	1.00	0.94	1.00	1.00	0.00	0.00	0.01
GH06BC	0.96	1.04	1.06	0.92	1.07	1.12	0.90	0.97	0.98	0.93	0.98	0.99	303	796	1711	2.00	6.05	18.01	0.76	1.00	1.00	0.93	1.00	1.00	0.00	0.00	0.01
GH06BD	0.98	1.04	1.06	0.94	1.07	1.13	0.91	0.97	0.98	0.92	0.98	0.99	300	796	1711	2.01	6.07	17.94	0.59	1.00	1.00	0.89	1.00	1.00	0.00	0.00	0.03
GH07AB	0.92	0.95	0.96	0.86	0.93	0.95	0.95	0.98	0.99	0.96	0.99	0.99	487	1028	2078	1.41	4.33	9.28	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH07AC	0.90	0.95	0.96	0.83	0.92	0.94	0.93	0.98	0.99	0.94	0.98	0.99	487	1028	2078	1.39	4.31	9.23	1.00	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH07AD	0.91	0.95	0.96	0.85	0.93	0.95	0.94	0.98	0.99	0.95	0.98	0.99	487	1028	2078	1.39	4.32	9.25	1.00	1.00	1.00	0.98	1.00	1.00	0.00	0.00	0.00
GH07BB	0.88	0.93	0.95	0.82	0.91	0.94	0.91	0.97	0.98	0.93	0.98	0.99	306	797	1815	1.81	5.44	16.02	0.76	1.00	1.00	0.95	1.00	1.00	0.00	0.00	0.00
GH07BC	0.84	0.92	0.95	0.77	0.89	0.93	0.88	0.96	0.98	0.90	0.97	0.98	306	797	1815	1.77	5.36	15.75	0.76	1.00	1.00	0.95	1.00	1.00	0.00	0.00	0.00
GH07BD	0.85	0.93	0.95	0.78	0.89	0.93	0.88	0.96	0.98	0.90	0.97	0.98	306	797	1815	1.79	5.37	15.70	0.59	1.00	1.00	0.89	1.00	1.00	0.00	0.00	0.02
GH08AB	0.94	1.00	1.04	0.90	0.97	1.03	0.96	0.99	0.99	0.97	0.99	1.00	582	1056	1976	1.59	3.63	10.86	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH08AC	0.92	0.99	1.04	0.89	0.95	1.02	0.95	0.98	0.99	0.95	0.98	0.99	582	1056	1976	1.57	3.61	10.81	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH08AD	0.93	0.99	1.04	0.89	0.96	1.02	0.95	0.98	0.99	0.96	0.99	0.99	582	1056	1976	1.58	3.62	10.83	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH08BB	0.87	0.98	1.07	0.83	0.94	1.03	0.91	0.97	0.98	0.92	0.98	0.99	476	861	1917	1.59	4.92	11.36	0.95	1.00	1.00	0.97	1.00	1.00	0.00	0.00	0.02
GH08BC	0.85	0.97	1.06	0.81	0.93	1.02	0.88	0.96	0.98	0.90	0.97	0.98	476	861	1917	1.55	4.86	11.28	0.95	1.00	1.00	0.93	1.00	1.00	0.00	0.00	0.03
GH08BD	0.85	0.98	1.07	0.82	0.93	1.02	0.89	0.96	0.98	0.90	0.97	0.99	476	861	1917	1.56	4.88	11.27	0.72	1.00	1.00	0.93	1.00	1.00	0.00	0.00	0.03

Table B.1 cont. The more important statistics for *SLA*1 (interim *SLA*). Robustness trials are yellow highlighted.

	D1: Final depletion 1+ pop			D1: Final depletion F pop			D8(0): Scaled Final 1+ pop size			D8(inc): Scaled Final 1+ pop size			D9: min mat fem pop level			D10:Relative increase 1+ pop			N9: Need satfn(20)			N9: Need satfn(100)			N12: Mean downstep		
	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%
GH21AB	0.49	0.51	0.52	0.48	0.53	0.54	0.88	0.98	0.99	0.93	0.98	0.99	482	1017	2056	0.76	2.35	5.11	1.00	1.00	1.00	0.97	1.00	1.00	0.00	0.00	0.02
GH21AD	0.49	0.51	0.52	0.47	0.52	0.54	0.88	0.97	0.98	0.92	0.97	0.99	482	1017	2056	0.75	2.34	5.08	1.00	1.00	1.00	0.93	1.00	1.00	0.00	0.00	0.04
GH21BB	0.49	0.52	0.53	0.48	0.54	0.56	0.91	0.97	0.98	0.92	0.97	0.98	303	789	1796	1.00	3.05	9.40	0.75	1.00	1.00	0.95	1.00	1.00	0.00	0.00	0.01
GH21BD	0.48	0.52	0.53	0.46	0.53	0.55	0.89	0.96	0.98	0.90	0.97	0.98	303	789	1796	0.99	3.01	9.30	0.59	1.00	1.00	0.88	1.00	1.00	0.00	0.00	0.03
GH22AB	0.28	0.73	0.93	0.24	0.64	0.86	0.82	0.95	0.98	0.83	0.96	0.99	445	977	2056	0.69	3.00	7.58	1.00	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.01
GH22AD	0.26	0.72	0.92	0.23	0.63	0.85	0.78	0.94	0.97	0.79	0.95	0.98	445	977	2056	0.67	2.96	7.53	0.98	1.00	1.00	0.96	1.00	1.00	0.00	0.00	0.03
GH22BB	0.02	0.29	0.65	0.02	0.24	0.58	0.35	0.74	0.92	0.41	0.78	0.93	104	653	1640	0.12	1.53	5.22	0.75	1.00	1.00	0.83	1.00	1.00	0.00	0.00	0.11
GH22BD	0.02	0.25	0.64	0.02	0.20	0.56	0.27	0.68	0.90	0.32	0.71	0.91	96	634	1640	0.11	1.35	4.79	0.59	1.00	1.00	0.67	0.98	1.00	0.00	0.00	0.14
GH23AB	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.96	0.99	0.99	482	1017	2056	1.46	4.51	9.75	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH23AD	0.94	0.98	0.99	0.88	0.96	0.98	0.94	0.98	0.99	0.95	0.98	0.99	482	1017	2056	1.45	4.50	9.73	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH23BB	0.91	0.96	0.98	0.84	0.93	0.97	0.91	0.97	0.98	0.93	0.98	0.99	303	789	1796	1.88	5.67	16.58	0.90	1.00	1.00	0.97	1.00	1.00	0.00	0.00	0.01
GH23BD	0.88	0.96	0.98	0.79	0.92	0.96	0.88	0.96	0.98	0.90	0.97	0.98	303	789	1796	1.86	5.60	16.01	0.70	1.00	1.00	0.92	1.00	1.00	0.00	0.00	0.02
GH24AB	0.95	0.98	0.99	0.89	0.96	0.98	0.95	0.98	0.99	0.96	0.99	0.99	506	1036	2131	1.47	3.92	9.56	1.00	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH24AD	0.94	0.98	0.99	0.87	0.96	0.97	0.94	0.98	0.99	0.95	0.98	0.99	506	1036	2131	1.46	3.90	9.54	0.91	1.00	1.00	0.95	1.00	1.00	0.00	0.00	0.01
GH24BB	0.89	0.97	0.98	0.83	0.94	0.97	0.90	0.97	0.98	0.92	0.98	0.99	388	851	1857	1.70	4.81	12.91	0.97	1.00	1.00	0.98	1.00	1.00	0.00	0.00	0.01
GH24BD	0.88	0.96	0.98	0.78	0.92	0.96	0.88	0.96	0.98	0.90	0.97	0.98	388	851	1857	1.68	4.78	12.48	0.74	1.00	1.00	0.93	1.00	1.00	0.00	0.00	0.03
GH24CB	0.96	0.98	0.99	0.90	0.96	0.98	0.96	0.98	0.99	0.96	0.99	1.00	672	1203	2235	1.16	2.70	8.57	1.00	1.00	1.00	0.94	1.00	1.00	0.00	0.00	0.03
GH24CD	0.95	0.98	0.99	0.89	0.96	0.98	0.95	0.98	0.99	0.95	0.99	0.99	672	1203	2235	1.15	2.69	8.56	0.96	1.00	1.00	0.85	1.00	1.00	0.00	0.00	0.06
GH25DB	0.06	0.27	0.73	0.05	0.25	0.69	0.26	0.49	0.83	0.31	0.53	0.85	251	630	1698	0.98	1.51	2.36	0.66	1.00	1.00	0.56	0.92	1.00	0.00	0.03	0.15
GH25DD	0.05	0.22	0.65	0.04	0.20	0.59	0.22	0.40	0.77	0.25	0.43	0.79	232	612	1698	0.81	1.26	2.04	0.52	0.99	1.00	0.41	0.79	1.00	0.00	0.10	0.22
GH26AB	0.96	0.98	0.99	0.92	0.97	0.98	0.96	0.98	0.99	0.96	0.99	0.99	439	946	1799	1.84	4.87	12.77	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH26AD	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.95	0.99	0.99	439	946	1799	1.82	4.85	12.73	0.87	1.00	1.00	0.97	1.00	1.00	0.00	0.00	0.00
GH26BB	0.88	0.96	0.98	0.78	0.93	0.96	0.90	0.97	0.98	0.91	0.98	0.99	448	809	1335	1.94	5.30	12.02	0.99	1.00	1.00	0.96	1.00	1.00	0.00	0.00	0.01
GH26BD	0.86	0.96	0.97	0.74	0.92	0.96	0.86	0.96	0.98	0.89	0.97	0.98	448	809	1335	1.91	5.28	11.91	0.78	1.00	1.00	0.91	1.00	1.00	0.00	0.00	0.02
GH27AB	0.92	1.01	1.11	0.90	0.98	1.05	0.97	0.99	1.00	0.97	0.99	1.00	499	1025	2600	1.46	4.43	10.39	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH27AD	0.91	1.01	1.11	0.89	0.97	1.04	0.96	0.98	1.00	0.96	0.99	1.00	499	1025	2600	1.46	4.43	10.37	0.95	1.00	1.00	0.98	1.00	1.00	0.00	0.00	0.00
GH27BB	0.86	1.00	1.11	0.81	0.96	1.06	0.94	0.97	0.99	0.94	0.98	1.00	479	804	1501	1.93	5.76	12.86	0.96	1.00	1.00	0.98	1.00	1.00	0.00	0.00	0.00
GH27BD	0.85	1.00	1.10	0.80	0.95	1.05	0.91	0.96	0.99	0.93	0.97	0.99	479	804	1501	1.88	5.72	12.84	0.77	1.00	1.00	0.92	1.00	1.00	0.00	0.00	0.02
GH28AB	0.93	0.99	1.02	0.90	0.97	1.02	0.95	0.98	0.99	0.95	0.99	0.99	479	1063	2246	1.49	3.92	11.37	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH28AD	0.93	0.99	1.02	0.88	0.96	1.02	0.94	0.98	0.99	0.94	0.99	0.99	479	1063	2246	1.48	3.91	11.34	0.98	1.00	1.00	0.98	1.00	1.00	0.00	0.00	0.01
GH28BB	0.89	0.97	1.02	0.83	0.93	1.01	0.92	0.97	0.98	0.94	0.98	0.99	369	868	1797	1.60	4.99	14.13	0.97	1.00	1.00	0.97	1.00	1.00	0.00	0.00	0.01
GH28BD	0.88	0.96	1.01	0.80	0.92	0.99	0.90	0.96	0.98	0.91	0.97	0.98	369	868	1797	1.56	4.95	13.78	0.79	1.00	1.00	0.89	1.00	1.00	0.00	0.00	0.02

Table B.2. The more important statistics for *SLA*2 (weighted-average). Robustness trials are yellow highlighted.

	D1: Final depletion 1+ pop			D1: Final depletion F pop			D8(0): Scaled Final 1+ pop size			D8(inc): Scaled Final 1+ pop size			D9: min mat fem pop level			D10:Relative increase 1+ pop			N9: Need satfn(20)			N9: Need satfn(100)			N12: Mean downstep		
	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%
GH01AA	0.97	0.99	0.99	0.94	0.98	0.99	0.97	0.99	0.99	0.98	0.99	1.00	482	1017	2056	1.49	4.54	9.78	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH01AB	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.96	0.99	0.99	482	1017	2056	1.46	4.51	9.75	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH01AC	0.93	0.98	0.99	0.86	0.95	0.97	0.93	0.98	0.99	0.94	0.98	0.99	482	1017	2056	1.45	4.49	9.72	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH01AD	0.94	0.98	0.99	0.88	0.96	0.98	0.94	0.98	0.99	0.95	0.98	0.99	482	1017	2056	1.45	4.50	9.73	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH01BA	0.92	0.97	0.99	0.87	0.95	0.98	0.94	0.98	0.99	0.96	0.99	0.99	303	789	1796	1.91	5.73	16.83	0.96	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH01BB	0.91	0.96	0.98	0.81	0.93	0.97	0.91	0.97	0.98	0.93	0.98	0.99	303	789	1796	1.88	5.67	16.56	0.96	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH01BC	0.87	0.95	0.98	0.77	0.92	0.95	0.88	0.96	0.98	0.89	0.97	0.98	303	789	1796	1.85	5.58	16.27	0.96	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH01BD	0.87	0.96	0.98	0.77	0.92	0.96	0.87	0.96	0.98	0.89	0.97	0.98	303	789	1796	1.86	5.60	16.16	0.77	1.00	1.00	0.95	1.00	1.00	0.00	0.00	0.01
GH01CA	0.98	0.99	1.00	0.96	0.98	0.99	0.98	0.99	1.00	0.98	1.00	1.00	715	1276	2666	1.12	3.12	7.33	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH01CB	0.96	0.99	0.99	0.92	0.97	0.98	0.96	0.99	0.99	0.96	0.99	1.00	715	1276	2666	1.11	3.10	7.31	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH01CC	0.94	0.98	0.99	0.89	0.96	0.98	0.94	0.98	0.99	0.95	0.99	0.99	715	1276	2666	1.09	3.08	7.29	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH01CD	0.95	0.99	0.99	0.90	0.97	0.98	0.95	0.99	0.99	0.95	0.99	0.99	715	1276	2666	1.10	3.09	7.29	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH02AB	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.96	0.99	0.99	482	1017	2056	1.46	4.51	9.75	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH02AC	0.93	0.98	0.99	0.86	0.95	0.97	0.93	0.98	0.99	0.94	0.98	0.99	482	1017	2056	1.45	4.49	9.72	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH02AD	0.94	0.98	0.99	0.88	0.96	0.98	0.94	0.98	0.99	0.95	0.98	0.99	482	1017	2056	1.45	4.50	9.73	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH02BB	0.91	0.96	0.98	0.81	0.93	0.97	0.91	0.97	0.98	0.93	0.98	0.99	303	789	1796	1.88	5.67	16.52	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH02BC	0.87	0.95	0.98	0.76	0.92	0.95	0.88	0.96	0.98	0.89	0.97	0.98	303	789	1796	1.85	5.58	16.21	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH02BD	0.87	0.96	0.98	0.77	0.92	0.96	0.87	0.96	0.98	0.89	0.97	0.98	303	789	1796	1.86	5.60	16.05	0.90	1.00	1.00	0.97	1.00	1.00	0.00	0.00	0.01
GH03AB	0.96	0.99	0.99	0.91	0.97	0.98	0.96	0.99	0.99	0.97	0.99	0.99	482	1017	2056	1.47	4.52	9.76	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH03AC	0.94	0.98	0.99	0.87	0.96	0.98	0.94	0.98	0.99	0.95	0.99	0.99	482	1017	2056	1.45	4.50	9.73	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH03BB	0.91	0.97	0.98	0.83	0.93	0.97	0.91	0.97	0.98	0.94	0.98	0.99	303	789	1796	1.89	5.68	16.54	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH03BC	0.87	0.96	0.98	0.80	0.92	0.96	0.89	0.96	0.98	0.90	0.97	0.98	303	789	1796	1.86	5.59	16.24	1.00	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH04AB	0.96	0.99	0.99	0.92	0.97	0.98	0.96	0.99	0.99	0.96	0.99	0.99	607	1434	2723	1.35	3.46	8.66	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH04AC	0.94	0.98	0.99	0.88	0.96	0.97	0.94	0.98	0.99	0.94	0.98	0.99	607	1434	2723	1.32	3.44	8.61	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH04AD	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.95	0.99	0.99	607	1434	2723	1.33	3.45	8.63	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH04BB	0.90	0.97	0.98	0.86	0.94	0.97	0.90	0.97	0.98	0.93	0.98	0.99	423	989	1961	1.71	4.05	11.29	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH04BC	0.89	0.96	0.98	0.84	0.92	0.96	0.89	0.96	0.98	0.91	0.97	0.98	423	989	1961	1.63	4.01	11.14	1.00	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH04BD	0.89	0.96	0.98	0.84	0.93	0.96	0.89	0.96	0.98	0.90	0.97	0.98	423	989	1961	1.66	4.03	11.15	0.94	1.00	1.00	0.96	1.00	1.00	0.00	0.00	0.01
GH05AB	0.93	0.98	0.99	0.89	0.96	0.98	0.93	0.98	0.99	0.94	0.99	0.99	466	980	2305	1.50	4.58	11.49	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH05AC	0.92	0.98	0.99	0.86	0.95	0.97	0.92	0.98	0.99	0.93	0.98	0.99	466	980	2305	1.49	4.56	11.44	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH05AD	0.93	0.98	0.99	0.87	0.96	0.98	0.93	0.98	0.99	0.93	0.98	0.99	466	980	2305	1.49	4.57	11.46	1.00	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH05BB	0.89	0.96	0.98	0.83	0.93	0.96	0.89	0.96	0.98	0.92	0.97	0.99	360	676	1475	2.09	6.02	14.04	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH05BC	0.85	0.95	0.97	0.76	0.90	0.95	0.86	0.95	0.97	0.88	0.96	0.98	360	676	1475	2.04	5.95	13.85	1.00	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH05BD	0.86	0.95	0.97	0.78	0.91	0.95	0.86	0.95	0.97	0.88	0.96	0.98	360	676	1475	2.06	5.97	13.65	0.85	1.00	1.00	0.95	1.00	1.00	0.00	0.00	0.01
GH06AB	1.00	1.03	1.04	1.01	1.07	1.09	0.96	0.99	0.99	0.97	0.99	0.99	486	1023	2071	1.53	4.69	10.06	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH06AC	0.98	1.03	1.04	0.96	1.06	1.08	0.94	0.98	0.99	0.95	0.99	0.99	486	1023	2071	1.51	4.67	10.02	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH06AD	0.99	1.03	1.04	0.99	1.06	1.08	0.95	0.98	0.99	0.96	0.99	0.99	486	1018	2071	1.52	4.68	10.04	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH06BB	1.00	1.05	1.06	0.98	1.08	1.14	0.93	0.98	0.99	0.94	0.98	0.99	303	796	1711	2.03	6.10	18.12	0.98	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH06BC	0.96	1.04	1.06	0.92	1.07	1.12	0.90	0.97	0.98	0.92	0.98	0.99	303	796	1711	2.00	6.05	17.84	0.98	1.00	1.00	0.98	1.00	1.00	0.00	0.00	0.00
GH06BD	0.97	1.04	1.06	0.94	1.07	1.13	0.90	0.97	0.98	0.92	0.98	0.99	300	796	1711	2.01	6.07	17.73	0.77	1.00	1.00	0.93	1.00	1.00	0.00	0.00	0.01
GH07AB	0.92	0.95	0.96	0.86	0.93	0.95	0.95	0.98	0.99	0.96	0.99	0.99	487	1028	2078	1.41	4.33	9.28	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH07AC	0.90	0.95	0.96	0.83	0.92	0.94	0.93	0.98	0.99	0.94	0.98	0.99	487	1028	2078	1.39	4.31	9.23	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH07AD	0.91	0.95	0.96	0.85	0.93	0.95	0.94	0.98	0.99	0.95	0.98	0.99	487	1028	2078	1.39	4.32	9.25	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH07BB	0.88	0.93	0.95	0.79	0.91	0.94	0.91	0.97	0.98	0.93	0.98	0.99	306	797	1815	1.81	5.44	15.94	0.98	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH07BC	0.84	0.92	0.95	0.74	0.89	0.93	0.88	0.96	0.98	0.89	0.97	0.98	306	797	1815	1.77	5.36	15.67	0.98	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH07BD	0.84	0.93	0.95	0.75	0.89	0.93	0.87	0.96	0.98	0.89	0.97	0.98	306	797	1815	1.79	5.37	15.58	0.77	1.00	1.00	0.95	1.00	1.00	0.00	0.00	0.01
GH08AB	0.94	1.00	1.04	0.90	0.97	1.03	0.96	0.99	0.99	0.97	0.99	1.00	582	1056	1976	1.59	3.63	10.86	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH08AC	0.92	0.99	1.04	0.86	0.95	1.02	0.94	0.98	0.99	0.95	0.98	0.99	582	1056	1976	1.56	3.61	10.81	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH08AD	0.93	0.99	1.04	0.87	0.96	1.02	0.95	0.98	0.99	0.95	0.99	0.99	582	1056	1976	1.58	3.62	10.83	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH08BB	0.86	0.98	1.07	0.83	0.94	1.03	0.90	0.97	0.98	0.91	0.98	0.99	476	861	1917	1.59	4.92	11.36	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH08BC	0.84	0.97	1.06	0.79	0.93	1.02	0.87	0.96	0.98	0.88	0.97	0.98	476	861	1917	1.54	4.86	11.28	1.00	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH08BD	0.85	0.98	1.07	0.80	0.93	1.02	0.87	0.96	0.98	0.88	0.97	0.99	476	861	1917	1.56	4.88	11.27	0.90	1.00	1.00	0.98	1.00	1.00	0.00	0.00	0.00

Table B.2 cont. The more important statistics for *SLA*2 (weighted-average). Robustness trials are yellow highlighted.

	D1: Final depletion 1+ pop			D1: Final depletion F pop			D8(0): Scaled Final 1+ pop size			D8(inc): Scaled Final 1+ pop size			D9: min mat fem pop level			D10:Relative increase 1+ pop			N9: Need satfn(20)			N9: Need satfn(100)			N12: Mean downstep		
	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%
GH21AB	0.49	0.51	0.52	0.47	0.53	0.54	0.88	0.98	0.99	0.91	0.98	0.99	482	1017	2056	0.75	2.35	5.11	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH21AD	0.48	0.51	0.52	0.45	0.52	0.54	0.88	0.97	0.98	0.90	0.97	0.99	482	1017	2056	0.75	2.34	5.08	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH21BB	0.49	0.52	0.53	0.48	0.54	0.56	0.90	0.97	0.98	0.92	0.97	0.98	303	784	1796	1.00	3.05	9.39	0.96	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH21BD	0.48	0.52	0.53	0.45	0.53	0.55	0.88	0.96	0.98	0.90	0.97	0.98	303	780	1796	0.99	3.01	9.28	0.77	1.00	1.00	0.94	1.00	1.00	0.00	0.00	0.01
GH22AB	0.27	0.73	0.93	0.24	0.64	0.86	0.81	0.95	0.98	0.82	0.96	0.99	445	977	2056	0.68	3.00	7.58	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH22AD	0.26	0.72	0.92	0.23	0.63	0.85	0.75	0.94	0.97	0.76	0.95	0.98	445	977	2056	0.60	2.96	7.53	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH22BB	0.01	0.28	0.65	0.01	0.24	0.58	0.08	0.74	0.92	0.09	0.78	0.93	32	652	1640	0.03	1.53	5.22	0.96	1.00	1.00	0.96	1.00	1.00	0.00	0.00	0.02
GH22BD	0.00	0.25	0.64	0.00	0.19	0.56	0.00	0.65	0.90	0.00	0.68	0.91	0	634	1640	0.00	1.29	4.78	0.77	1.00	1.00	0.83	1.00	1.00	0.00	0.00	0.04
GH23AB	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.96	0.99	0.99	482	1017	2056	1.46	4.51	9.75	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH23AD	0.94	0.98	0.99	0.88	0.96	0.98	0.94	0.98	0.99	0.95	0.98	0.99	482	1017	2056	1.45	4.50	9.73	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH23BB	0.91	0.96	0.98	0.81	0.93	0.97	0.91	0.97	0.98	0.93	0.98	0.99	303	789	1796	1.88	5.67	16.52	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH23BD	0.87	0.96	0.98	0.77	0.92	0.96	0.87	0.96	0.98	0.89	0.97	0.98	303	789	1796	1.86	5.60	15.93	0.86	1.00	1.00	0.96	1.00	1.00	0.00	0.00	0.01
GH24AB	0.95	0.98	0.99	0.89	0.96	0.98	0.95	0.98	0.99	0.96	0.99	0.99	506	1036	2131	1.45	3.92	9.56	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH24AD	0.94	0.98	0.99	0.86	0.96	0.97	0.94	0.98	0.99	0.94	0.98	0.99	506	1036	2131	1.42	3.90	9.54	0.99	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH24BB	0.89	0.97	0.98	0.83	0.94	0.97	0.89	0.97	0.98	0.92	0.98	0.99	388	851	1857	1.70	4.81	12.91	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH24BD	0.85	0.96	0.98	0.77	0.92	0.96	0.85	0.96	0.98	0.87	0.97	0.98	388	851	1857	1.68	4.78	12.48	0.92	1.00	1.00	0.97	1.00	1.00	0.00	0.00	0.01
GH24CB	0.94	0.98	0.99	0.88	0.96	0.98	0.94	0.98	0.99	0.95	0.99	1.00	672	1203	2235	1.15	2.70	8.57	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH24CD	0.94	0.98	0.99	0.87	0.96	0.98	0.94	0.98	0.99	0.95	0.99	0.99	672	1203	2235	1.14	2.69	8.56	1.00	1.00	1.00	0.96	1.00	1.00	0.00	0.00	0.01
GH25DB	0.04	0.25	0.71	0.03	0.22	0.67	0.17	0.43	0.83	0.20	0.47	0.85	211	618	1698	0.63	1.31	2.36	0.98	1.00	1.00	0.64	1.00	1.00	0.00	0.00	0.05
GH25DD	0.02	0.17	0.64	0.02	0.15	0.58	0.11	0.30	0.77	0.13	0.33	0.79	141	556	1698	0.41	0.97	2.02	0.74	1.00	1.00	0.47	0.91	1.00	0.00	0.02	0.08
GH26AB	0.96	0.98	0.99	0.92	0.97	0.98	0.96	0.98	0.99	0.96	0.99	0.99	439	946	1799	1.84	4.87	12.77	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH26AD	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.95	0.99	0.99	439	946	1799	1.82	4.85	12.73	0.98	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH26BB	0.87	0.96	0.98	0.77	0.93	0.96	0.90	0.97	0.98	0.91	0.98	0.99	448	809	1335	1.94	5.30	12.02	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH26BD	0.82	0.96	0.97	0.70	0.92	0.96	0.85	0.96	0.98	0.88	0.97	0.98	448	809	1335	1.88	5.28	11.91	0.91	1.00	1.00	0.96	1.00	1.00	0.00	0.00	0.00
GH27AB	0.92	1.01	1.10	0.90	0.98	1.05	0.96	0.99	1.00	0.97	0.99	1.00	499	1025	2600	1.46	4.43	10.39	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH27AD	0.91	1.01	1.10	0.89	0.97	1.04	0.96	0.98	1.00	0.96	0.99	1.00	499	1025	2600	1.46	4.43	10.37	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH27BB	0.85	1.00	1.11	0.80	0.96	1.06	0.93	0.97	0.99	0.94	0.98	1.00	479	804	1501	1.92	5.76	12.86	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH27BD	0.84	1.00	1.10	0.78	0.95	1.05	0.91	0.96	0.99	0.92	0.97	0.99	479	804	1501	1.88	5.72	12.84	0.94	1.00	1.00	0.98	1.00	1.00	0.00	0.00	0.00
GH28AB	0.93	0.99	1.02	0.90	0.97	1.02	0.95	0.98	0.99	0.95	0.99	0.99	479	1063	2246	1.49	3.92	11.37	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH28AD	0.92	0.99	1.02	0.88	0.96	1.02	0.93	0.98	0.99	0.94	0.99	0.99	479	1063	2246	1.48	3.91	11.34	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH28BB	0.89	0.97	1.02	0.82	0.93	1.01	0.92	0.97	0.98	0.93	0.98	0.99	369	868	1797	1.60	4.99	14.09	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH28BD	0.84	0.96	1.01	0.79	0.92	0.99	0.89	0.96	0.98	0.91	0.97	0.98	369	868	1797	1.56	4.95	13.64	0.95	1.00	1.00	0.97	1.00	1.00	0.00	0.00	0.00

Table B.3. The more important statistics for *SLA*3 (variant of weighted-average). Robustness trials are yellow highlighted.

	D1: Final depletion 1+ pop			D1: Final depletion F pop			D8(0): Scaled Final 1+ pop size			D8(inc): Scaled Final 1+ pop size			D9: min mat fem pop level			D10:Relative increase 1+ pop			N9: Need satfn(20)			N9: Need satfn(100)			N12: Mean downstep		
	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%
GH01AA	0.97	0.99	0.99	0.94	0.98	0.99	0.97	0.99	0.99	0.98	0.99	1.00	482	1017	2056	1.49	4.54	9.78	1.00	1.00	1.00	0.95	1.00	1.00	0.00	0.00	0.03
GH01AB	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.96	0.99	0.99	482	1017	2056	1.46	4.51	9.75	1.00	1.00	1.00	0.91	1.00	1.00	0.00	0.00	0.05
GH01AC	0.93	0.98	0.99	0.86	0.95	0.97	0.93	0.98	0.99	0.94	0.98	0.99	482	1017	2056	1.45	4.49	9.72	1.00	1.00	1.00	0.86	1.00	1.00	0.00	0.00	0.06
GH01AD	0.94	0.98	0.99	0.88	0.96	0.98	0.94	0.98	0.99	0.95	0.98	0.99	482	1017	2056	1.45	4.50	9.73	1.00	1.00	1.00	0.85	1.00	1.00	0.00	0.00	0.06
GH01BA	0.93	0.97	0.99	0.87	0.95	0.98	0.94	0.98	0.99	0.96	0.99	0.99	303	789	1796	1.91	5.73	16.89	0.92	1.00	1.00	0.90	1.00	1.00	0.00	0.00	0.05
GH01BB	0.91	0.96	0.98	0.84	0.93	0.97	0.91	0.97	0.98	0.93	0.98	0.99	303	789	1796	1.88	5.67	16.65	0.92	1.00	1.00	0.86	1.00	1.00	0.00	0.00	0.04
GH01BC	0.88	0.95	0.98	0.79	0.92	0.95	0.89	0.96	0.98	0.91	0.97	0.98	303	789	1796	1.85	5.58	16.42	0.92	1.00	1.00	0.81	1.00	1.00	0.00	0.00	0.04
GH01BD	0.89	0.96	0.98	0.81	0.92	0.96	0.89	0.96	0.98	0.91	0.97	0.98	303	789	1796	1.86	5.60	16.39	0.71	1.00	1.00	0.74	1.00	1.00	0.00	0.00	0.06
GH01CA	0.98	0.99	1.00	0.96	0.98	0.99	0.98	0.99	1.00	0.98	1.00	1.00	715	1276	2666	1.12	3.12	7.33	1.00	1.00	1.00	0.85	1.00	1.00	0.00	0.00	0.06
GH01CB	0.97	0.99	0.99	0.93	0.97	0.98	0.97	0.99	0.99	0.97	0.99	1.00	715	1276	2666	1.11	3.10	7.31	1.00	1.00	1.00	0.78	1.00	1.00	0.00	0.00	0.09
GH01CC	0.96	0.98	0.99	0.92	0.96	0.98	0.96	0.98	0.99	0.96	0.99	0.99	715	1276	2666	1.09	3.08	7.29	1.00	1.00	1.00	0.71	1.00	1.00	0.00	0.00	0.11
GH01CD	0.96	0.99	0.99	0.92	0.97	0.98	0.96	0.99	0.99	0.97	0.99	0.99	715	1276	2666	1.10	3.09	7.29	1.00	1.00	1.00	0.72	1.00	1.00	0.00	0.00	0.12
GH02AB	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.96	0.99	0.99	482	1017	2056	1.46	4.51	9.75	1.00	1.00	1.00	0.94	1.00	1.00	0.00	0.00	0.03
GH02AC	0.93	0.98	0.99	0.86	0.95	0.97	0.93	0.98	0.99	0.94	0.98	0.99	482	1017	2056	1.45	4.49	9.72	1.00	1.00	1.00	0.94	1.00	1.00	0.00	0.00	0.04
GH02AD	0.94	0.98	0.99	0.88	0.96	0.98	0.94	0.98	0.99	0.95	0.98	0.99	482	1017	2056	1.45	4.50	9.73	1.00	1.00	1.00	0.92	1.00	1.00	0.00	0.00	0.05
GH02BB	0.91	0.96	0.98	0.85	0.93	0.97	0.92	0.97	0.98	0.94	0.98	0.99	303	789	1796	1.88	5.67	16.74	1.00	1.00	1.00	0.85	0.98	1.00	0.00	0.01	0.04
GH02BC	0.88	0.96	0.98	0.79	0.92	0.95	0.89	0.96	0.98	0.91	0.97	0.98	303	789	1796	1.85	5.58	16.49	1.00	1.00	1.00	0.81	0.98	1.00	0.00	0.01	0.04
GH02BD	0.88	0.96	0.98	0.81	0.92	0.96	0.89	0.96	0.98	0.91	0.97	0.98	303	789	1796	1.86	5.61	16.44	0.86	1.00	1.00	0.79	0.96	1.00	0.00	0.03	0.06
GH03AB	0.96	0.99	0.99	0.91	0.97	0.98	0.96	0.99	0.99	0.97	0.99	0.99	482	1017	2056	1.47	4.52	9.76	1.00	1.00	1.00	0.94	1.00	1.00	0.00	0.00	0.03
GH03AC	0.94	0.98	0.99	0.87	0.96	0.98	0.94	0.98	0.99	0.95	0.99	0.99	482	1017	2056	1.45	4.50	9.73	1.00	1.00	1.00	0.87	1.00	1.00	0.00	0.00	0.05
GH03BB	0.91	0.97	0.98	0.84	0.94	0.97	0.92	0.97	0.98	0.94	0.98	0.99	303	789	1796	1.89	5.68	16.55	1.00	1.00	1.00	0.90	1.00	1.00	0.00	0.00	0.03
GH03BC	0.88	0.96	0.98	0.80	0.92	0.96	0.89	0.96	0.98	0.90	0.97	0.98	303	789	1796	1.86	5.61	16.29	1.00	1.00	1.00	0.87	1.00	1.00	0.00	0.00	0.04
GH04AB	0.96	0.99	0.99	0.92	0.97	0.98	0.96	0.99	0.99	0.97	0.99	0.99	607	1434	2723	1.38	3.46	8.66	1.00	1.00	1.00	0.92	1.00	1.00	0.00	0.00	0.02
GH04AC	0.95	0.98	0.99	0.89	0.96	0.97	0.95	0.98	0.99	0.96	0.98	0.99	607	1434	2723	1.37	3.44	8.61	1.00	1.00	1.00	0.87	1.00	1.00	0.00	0.00	0.05
GH04AD	0.96	0.98	0.99	0.90	0.96	0.98	0.96	0.98	0.99	0.96	0.99	0.99	607	1434	2723	1.38	3.45	8.63	0.99	1.00	1.00	0.87	1.00	1.00	0.00	0.00	0.04
GH04BB	0.93	0.97	0.98	0.88	0.94	0.97	0.93	0.97	0.98	0.94	0.98	0.99	423	989	1961	1.71	4.05	11.31	1.00	1.00	1.00	0.89	1.00	1.00	0.00	0.00	0.04
GH04BC	0.90	0.96	0.98	0.85	0.92	0.96	0.90	0.96	0.98	0.93	0.97	0.98	423	989	1961	1.66	4.01	11.16	1.00	1.00	1.00	0.85	1.00	1.00	0.00	0.00	0.07
GH04BD	0.91	0.96	0.98	0.85	0.93	0.96	0.92	0.96	0.98	0.92	0.97	0.98	423	989	1961	1.68	4.03	11.18	0.90	1.00	1.00	0.80	1.00	1.00	0.00	0.00	0.08
GH05AB	0.96	0.98	0.99	0.91	0.96	0.98	0.96	0.98	0.99	0.96	0.99	0.99	466	980	2305	1.50	4.58	11.49	1.00	1.00	1.00	0.75	1.00	1.00	0.00	0.00	0.09
GH05AC	0.95	0.98	0.99	0.88	0.95	0.97	0.95	0.98	0.99	0.95	0.98	0.99	466	980	2305	1.49	4.56	11.44	1.00	1.00	1.00	0.71	1.00	1.00	0.00	0.00	0.11
GH05AD	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.95	0.98	0.99	466	980	2305	1.49	4.57	11.46	0.99	1.00	1.00	0.70	1.00	1.00	0.00	0.00	0.12
GH05BB	0.90	0.96	0.98	0.83	0.93	0.96	0.90	0.96	0.98	0.93	0.97	0.99	360	676	1475	2.09	6.02	14.06	1.00	1.00	1.00	0.82	1.00	1.00	0.00	0.00	0.07
GH05BC	0.88	0.95	0.97	0.80	0.91	0.95	0.89	0.95	0.97	0.90	0.96	0.98	360	676	1475	2.04	5.95	13.88	1.00	1.00	1.00	0.74	1.00	1.00	0.00	0.00	0.11
GH05BD	0.89	0.95	0.97	0.81	0.91	0.95	0.89	0.95	0.97	0.91	0.96	0.98	360	676	1475	2.06	5.97	13.71	0.79	1.00	1.00	0.71	0.98	1.00	0.00	0.02	0.11
GH06AB	1.00	1.03	1.04	1.01	1.07	1.09	0.96	0.99	0.99	0.97	0.99	0.99	486	1023	2071	1.53	4.69	10.06	1.00	1.00	1.00	0.90	1.00	1.00	0.00	0.00	0.05
GH06AC	0.99	1.03	1.04	0.96	1.06	1.08	0.95	0.98	0.99	0.95	0.99	0.99	486	1023	2071	1.51	4.67	10.02	1.00	1.00	1.00	0.83	1.00	1.00	0.00	0.00	0.07
GH06AD	0.99	1.03	1.04	0.99	1.06	1.08	0.95	0.98	0.99	0.96	0.99	0.99	486	1018	2071	1.52	4.68	10.04	1.00	1.00	1.00	0.81	1.00	1.00	0.00	0.00	0.07
GH06BB	1.00	1.05	1.06	0.99	1.08	1.14	0.93	0.98	0.99	0.95	0.98	0.99	303	796	1711	2.03	6.10	18.27	0.93	1.00	1.00	0.81	1.00	1.00	0.00	0.00	0.05
GH06BC	0.97	1.04	1.06	0.92	1.07	1.12	0.91	0.97	0.98	0.93	0.98	0.99	303	796	1711	2.00	6.05	18.08	0.93	1.00	1.00	0.77	1.00	1.00	0.00	0.00	0.04
GH06BD	0.98	1.04	1.06	0.94	1.07	1.13	0.91	0.97	0.98	0.93	0.98	0.99	300	796	1711	2.01	6.07	18.09	0.71	1.00	1.00	0.72	1.00	1.00	0.00	0.00	0.06
GH07AB	0.92	0.95	0.96	0.87	0.94	0.95	0.95	0.98	0.99	0.96	0.99	0.99	487	1028	2078	1.41	4.33	9.28	1.00	1.00	1.00	0.90	1.00	1.00	0.00	0.00	0.04
GH07AC	0.90	0.95	0.96	0.83	0.92	0.94	0.93	0.98	0.99	0.94	0.98	0.99	487	1028	2078	1.39	4.31	9.23	1.00	1.00	1.00	0.84	1.00	1.00	0.00	0.00	0.06
GH07AD	0.91	0.95	0.96	0.85	0.93	0.95	0.94	0.98	0.99	0.95	0.98	0.99	487	1028	2078	1.39	4.32	9.25	1.00	1.00	1.00	0.84	1.00	1.00	0.00	0.00	0.06
GH07BB	0.88	0.93	0.95	0.82	0.91	0.94	0.91	0.97	0.98	0.94	0.98	0.99	306	797	1815	1.81	5.44	16.00	0.93	1.00	1.00	0.85	1.00	1.00	0.00	0.00	0.04
GH07BC	0.85	0.92	0.95	0.76	0.89	0.93	0.89	0.96	0.98	0.91	0.97	0.98	306	797	1815	1.77	5.36	15.75	0.93	1.00	1.00	0.81	1.00	1.00	0.00	0.00	0.04
GH07BD	0.86	0.93	0.95	0.79	0.89	0.93	0.88	0.96	0.98	0.91	0.97	0.98	306	797	1815	1.79	5.38	15.79	0.71	1.00	1.00	0.76	1.00	1.00	0.00	0.00	0.06
GH08AB	0.94	1.00	1.04	0.91	0.97	1.03	0.96	0.99	0.99	0.97	0.99	1.00	582	1056	1976	1.60	3.63	10.86	1.00	1.00	1.00	0.93	1.00	1.00	0.00	0.00	0.03
GH08AC	0.93	0.99	1.04	0.89	0.96	1.02	0.95	0.98	0.99	0.96	0.98	0.99	582	1056	1976	1.58	3.61	10.81	1.00	1.00	1.00	0.91	1.00	1.00	0.00	0.00	0.04
GH08AD	0.93	0.99	1.04	0.90	0.96	1.02	0.96	0.98	0.99	0.96	0.99	0.99	582	1056	1976	1.59	3.62	10.83	1.00	1.00	1.00	0.90	1.00	1.00	0.00	0.00	0.05
GH08BB	0.87	0.98	1.07	0.84	0.95	1.03	0.93	0.97	0.98	0.94	0.98	0.99	476	861	1917	1.65	4.92	11.36	1.00	1.00	1.00	0.73	1.00	1.00	0.00	0.00	0.10
GH08BC	0.85	0.97	1.06	0.82	0.93	1.02	0.90	0.96	0.98	0.91	0.97	0.98	476	861	1917	1.65	4.86	11.28	1.00	1.00	1.00	0.68	1.00	1.00	0.00	0.00	0.11
GH08BD	0.86	0.98	1.07	0.83	0.93	1.02	0.92	0.96	0.98	0.92	0.97	0.99	476	861	1917	1.65	4.88	11.27	0.85	1.00	1.00	0.68	1.00	1.00	0.00	0.00	0.12

Table B.3 cont. The more important statistics for *SLA*3 (variant of weighted-average). Robustness trials are yellow highlighted.

	D1: Final depletion 1+ pop			D1: Final depletion F pop			D8(0): Scaled Final 1+ pop size			D8(inc): Scaled Final 1+ pop size			D9: min mat fem pop level			D10:Relative increase 1+ pop			N9: Need satfn(20)			N9: Need satfn(100)			N12: Mean downstep		
	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%
GH21AB	0.50	0.51	0.52	0.50	0.53	0.54	0.88	0.98	0.99	0.94	0.98	0.99	482	1017	2056	0.78	2.35	5.11	1.00	1.00	1.00	0.73	1.00	1.00	0.00	0.00	0.10
GH21AD	0.50	0.51	0.52	0.49	0.52	0.54	0.88	0.97	0.98	0.93	0.98	0.99	482	1017	2056	0.78	2.34	5.08	1.00	1.00	1.00	0.65	1.00	1.00	0.00	0.00	0.13
GH21BB	0.49	0.52	0.53	0.49	0.54	0.56	0.91	0.97	0.98	0.92	0.97	0.98	303	789	1796	1.02	3.05	9.40	0.92	1.00	1.00	0.77	1.00	1.00	0.00	0.00	0.05
GH21BD	0.48	0.52	0.53	0.47	0.53	0.56	0.89	0.96	0.98	0.90	0.97	0.98	303	789	1796	1.02	3.01	9.31	0.71	1.00	1.00	0.70	1.00	1.00	0.00	0.00	0.08
GH22AB	0.29	0.73	0.93	0.24	0.64	0.86	0.86	0.95	0.98	0.88	0.96	0.99	480	986	2056	0.75	3.00	7.58	1.00	1.00	1.00	0.76	1.00	1.00	0.00	0.00	0.07
GH22AD	0.29	0.72	0.92	0.23	0.63	0.85	0.84	0.94	0.97	0.85	0.95	0.98	480	986	2056	0.72	2.96	7.53	1.00	1.00	1.00	0.71	1.00	1.00	0.00	0.00	0.10
GH22BB	0.02	0.29	0.67	0.02	0.24	0.59	0.45	0.77	0.92	0.50	0.80	0.93	161	666	1640	0.22	1.54	5.27	0.92	1.00	1.00	0.53	0.97	1.00	0.00	0.02	0.13
GH22BD	0.02	0.27	0.66	0.02	0.22	0.57	0.37	0.71	0.91	0.41	0.74	0.92	152	652	1640	0.19	1.40	4.84	0.71	1.00	1.00	0.47	0.93	1.00	0.00	0.04	0.16
GH23AB	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.96	0.99	0.99	482	1017	2056	1.47	4.51	9.75	1.00	1.00	1.00	0.91	1.00	1.00	0.00	0.00	0.03
GH23AD	0.94	0.98	0.99	0.88	0.96	0.98	0.94	0.98	0.99	0.95	0.98	0.99	482	1017	2056	1.47	4.50	9.73	1.00	1.00	1.00	0.86	1.00	1.00	0.00	0.00	0.06
GH23BB	0.91	0.96	0.98	0.84	0.93	0.97	0.91	0.97	0.98	0.94	0.98	0.99	303	789	1796	1.88	5.67	16.73	1.00	1.00	1.00	0.85	1.00	1.00	0.00	0.00	0.04
GH23BD	0.89	0.96	0.98	0.81	0.92	0.96	0.89	0.96	0.98	0.91	0.97	0.98	303	789	1796	1.86	5.60	16.48	0.81	1.00	1.00	0.78	1.00	1.00	0.00	0.00	0.06
GH24AB	0.96	0.98	0.99	0.92	0.96	0.98	0.96	0.98	0.99	0.96	0.99	0.99	506	1036	2131	1.52	3.92	9.56	1.00	1.00	1.00	0.86	1.00	1.00	0.00	0.00	0.06
GH24AD	0.95	0.98	0.99	0.90	0.96	0.97	0.95	0.98	0.99	0.95	0.98	0.99	506	1036	2131	1.51	3.90	9.54	0.97	1.00	1.00	0.79	1.00	1.00	0.00	0.00	0.08
GH24BB	0.92	0.97	0.98	0.84	0.94	0.97	0.92	0.97	0.98	0.93	0.98	0.99	388	851	1857	1.70	4.81	12.91	1.00	1.00	1.00	0.80	1.00	1.00	0.00	0.00	0.06
GH24BD	0.90	0.96	0.98	0.81	0.92	0.96	0.90	0.96	0.98	0.92	0.97	0.98	388	851	1857	1.68	4.78	12.54	0.88	1.00	1.00	0.74	1.00	1.00	0.00	0.00	0.10
GH24CB	0.96	0.99	0.99	0.92	0.96	0.98	0.96	0.99	0.99	0.96	0.99	1.00	672	1203	2235	1.16	2.70	8.57	1.00	1.00	1.00	0.57	1.00	1.00	0.00	0.00	0.11
GH24CD	0.96	0.98	0.99	0.90	0.96	0.98	0.96	0.98	0.99	0.96	0.99	0.99	672	1203	2235	1.16	2.69	8.56	1.00	1.00	1.00	0.51	1.00	1.00	0.00	0.00	0.14
GH25DB	0.10	0.34	0.77	0.09	0.30	0.74	0.44	0.61	0.85	0.52	0.67	0.86	244	630	1698	1.29	2.02	2.49	0.92	1.00	1.00	0.37	0.71	1.00	0.00	0.09	0.17
GH25DD	0.09	0.29	0.73	0.08	0.26	0.70	0.39	0.55	0.83	0.43	0.60	0.84	217	618	1698	1.18	1.83	2.23	0.66	1.00	1.00	0.27	0.58	0.96	0.02	0.13	0.20
GH26AB	0.96	0.98	0.99	0.92	0.97	0.98	0.96	0.98	0.99	0.96	0.99	0.99	439	946	1799	1.84	4.87	12.77	1.00	1.00	1.00	0.96	1.00	1.00	0.00	0.00	0.03
GH26AD	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.96	0.99	0.99	439	946	1799	1.82	4.85	12.73	0.96	1.00	1.00	0.92	1.00	1.00	0.00	0.00	0.04
GH26BB	0.91	0.96	0.98	0.85	0.93	0.96	0.91	0.97	0.98	0.94	0.98	0.99	448	809	1335	1.94	5.30	12.02	1.00	1.00	1.00	0.83	1.00	1.00	0.00	0.00	0.05
GH26BD	0.89	0.96	0.97	0.83	0.92	0.96	0.89	0.96	0.98	0.90	0.97	0.98	448	809	1335	1.91	5.28	11.91	0.87	1.00	1.00	0.73	1.00	1.00	0.00	0.00	0.07
GH27AB	0.92	1.01	1.11	0.90	0.98	1.05	0.97	0.99	1.00	0.97	0.99	1.00	499	1025	2600	1.46	4.43	10.39	1.00	1.00	1.00	0.91	1.00	1.00	0.00	0.00	0.04
GH27AD	0.91	1.01	1.11	0.89	0.97	1.04	0.96	0.98	1.00	0.96	0.99	1.00	499	1025	2600	1.46	4.43	10.37	0.98	1.00	1.00	0.87	1.00	1.00	0.00	0.00	0.07
GH27BB	0.86	1.00	1.11	0.81	0.96	1.06	0.94	0.97	0.99	0.95	0.98	1.00	479	804	1501	1.94	5.76	12.86	1.00	1.00	1.00	0.86	1.00	1.00	0.00	0.00	0.05
GH27BD	0.85	1.00	1.10	0.80	0.95	1.05	0.92	0.96	0.99	0.94	0.97	0.99	479	804	1501	1.92	5.72	12.84	0.90	1.00	1.00	0.77	1.00	1.00	0.00	0.00	0.07
GH28AB	0.93	0.99	1.02	0.91	0.97	1.02	0.96	0.98	0.99	0.96	0.99	0.99	479	1063	2246	1.49	3.92	11.37	1.00	1.00	1.00	0.91	1.00	1.00	0.00	0.00	0.06
GH28AD	0.93	0.99	1.02	0.90	0.96	1.02	0.95	0.98	0.99	0.95	0.99	0.99	479	1063	2246	1.48	3.91	11.34	1.00	1.00	1.00	0.88	1.00	1.00	0.00	0.00	0.07
GH28BB	0.89	0.97	1.02	0.84	0.93	1.01	0.93	0.97	0.98	0.94	0.98	0.99	369	868	1797	1.60	4.99	14.21	1.00	1.00	1.00	0.87	1.00	1.00	0.00	0.00	0.04
GH28BD	0.89	0.96	1.01	0.80	0.92	0.99	0.91	0.96	0.98	0.92	0.97	0.98	369	868	1797	1.57	4.95	13.93	0.92	1.00	1.00	0.78	1.00	1.00	0.00	0.00	0.06

Table B.4. The more important statistics for *SLA*4 (variant of weighted-average). Robustness trials are yellow highlighted.

	D1: Final depletion 1+ pop			D1: Final depletion F pop			D8(0): Scaled Final 1+ pop size			D8(inc): Scaled Final 1+ pop size			D9: min mat fem pop level			D10:Relative increase 1+ pop			N9: Need satfn(20)			N9: Need satfn(100)			N12: Mean downstep		
	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%
GH01AA	0.97	0.99	0.99	0.94	0.98	0.99	0.97	0.99	0.99	0.98	0.99	1.00	482	1017	2056	1.49	4.54	9.78	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH01AB	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.96	0.99	0.99	482	1017	2056	1.46	4.51	9.75	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH01AC	0.93	0.98	0.99	0.86	0.95	0.97	0.93	0.98	0.99	0.94	0.98	0.99	482	1017	2056	1.45	4.49	9.72	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH01AD	0.94	0.98	0.99	0.88	0.96	0.98	0.94	0.98	0.99	0.95	0.98	0.99	482	1017	2056	1.45	4.50	9.73	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH01BA	0.92	0.97	0.99	0.87	0.95	0.98	0.94	0.98	0.99	0.96	0.99	0.99	303	789	1796	1.91	5.73	16.86	0.92	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH01BB	0.91	0.96	0.98	0.83	0.93	0.97	0.91	0.97	0.98	0.93	0.98	0.99	303	789	1796	1.88	5.67	16.60	0.92	1.00	1.00	0.98	1.00	1.00	0.00	0.00	0.00
GH01BC	0.87	0.95	0.98	0.79	0.92	0.95	0.88	0.96	0.98	0.90	0.97	0.98	303	789	1796	1.85	5.58	16.32	0.92	1.00	1.00	0.97	1.00	1.00	0.00	0.00	0.00
GH01BD	0.88	0.96	0.98	0.79	0.92	0.96	0.88	0.96	0.98	0.90	0.97	0.98	303	789	1796	1.86	5.60	16.20	0.71	1.00	1.00	0.89	1.00	1.00	0.00	0.00	0.02
GH01CA	0.98	0.99	1.00	0.96	0.98	0.99	0.98	0.99	1.00	0.98	1.00	1.00	715	1276	2666	1.12	3.12	7.33	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH01CB	0.96	0.99	0.99	0.92	0.97	0.98	0.96	0.99	0.99	0.97	0.99	1.00	715	1276	2666	1.11	3.10	7.31	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH01CC	0.95	0.98	0.99	0.89	0.96	0.98	0.95	0.98	0.99	0.95	0.99	0.99	715	1276	2666	1.09	3.08	7.29	1.00	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH01CD	0.95	0.99	0.99	0.91	0.97	0.98	0.95	0.99	0.99	0.96	0.99	0.99	715	1276	2666	1.10	3.09	7.29	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH02AB	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.96	0.99	0.99	482	1017	2056	1.46	4.51	9.75	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH02AC	0.93	0.98	0.99	0.86	0.95	0.97	0.93	0.98	0.99	0.94	0.98	0.99	482	1017	2056	1.45	4.49	9.72	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH02AD	0.94	0.98	0.99	0.88	0.96	0.98	0.94	0.98	0.99	0.95	0.98	0.99	482	1017	2056	1.45	4.50	9.73	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH02BB	0.91	0.96	0.98	0.82	0.93	0.97	0.91	0.97	0.98	0.93	0.98	0.99	303	789	1796	1.88	5.67	16.66	1.00	1.00	1.00	0.95	1.00	1.00	0.00	0.00	0.03
GH02BC	0.87	0.95	0.98	0.79	0.92	0.95	0.88	0.96	0.98	0.90	0.97	0.98	303	789	1796	1.85	5.58	16.39	1.00	1.00	1.00	0.94	1.00	1.00	0.00	0.00	0.02
GH02BD	0.88	0.96	0.98	0.79	0.92	0.96	0.88	0.96	0.98	0.90	0.97	0.98	303	789	1796	1.86	5.60	16.32	0.86	1.00	1.00	0.90	1.00	1.00	0.00	0.00	0.04
GH03AB	0.96	0.99	0.99	0.91	0.97	0.98	0.96	0.99	0.99	0.97	0.99	0.99	482	1017	2056	1.47	4.52	9.76	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH03AC	0.94	0.98	0.99	0.87	0.96	0.98	0.94	0.98	0.99	0.95	0.99	0.99	482	1017	2056	1.45	4.50	9.73	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH03BB	0.91	0.97	0.98	0.84	0.93	0.97	0.92	0.97	0.98	0.94	0.98	0.99	303	789	1796	1.89	5.68	16.55	1.00	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH03BC	0.87	0.96	0.98	0.80	0.92	0.96	0.89	0.96	0.98	0.90	0.97	0.98	303	789	1796	1.86	5.59	16.26	1.00	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH04AB	0.96	0.99	0.99	0.92	0.97	0.98	0.96	0.99	0.99	0.96	0.99	0.99	607	1434	2723	1.35	3.46	8.66	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH04AC	0.94	0.98	0.99	0.88	0.96	0.97	0.94	0.98	0.99	0.94	0.98	0.99	607	1434	2723	1.33	3.44	8.61	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH04AD	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.95	0.99	0.99	607	1434	2723	1.33	3.45	8.63	0.99	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH04BB	0.91	0.97	0.98	0.87	0.94	0.97	0.91	0.97	0.98	0.93	0.98	0.99	423	989	1961	1.71	4.05	11.30	1.00	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH04BC	0.90	0.96	0.98	0.85	0.92	0.96	0.90	0.96	0.98	0.91	0.97	0.98	423	989	1961	1.65	4.01	11.15	1.00	1.00	1.00	0.98	1.00	1.00	0.00	0.00	0.00
GH04BD	0.90	0.96	0.98	0.84	0.93	0.96	0.90	0.96	0.98	0.91	0.97	0.98	423	989	1961	1.67	4.03	11.16	0.90	1.00	1.00	0.95	1.00	1.00	0.00	0.00	0.02
GH05AB	0.95	0.98	0.99	0.89	0.96	0.98	0.95	0.98	0.99	0.95	0.99	0.99	466	980	2305	1.50	4.58	11.49	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH05AC	0.93	0.98	0.99	0.88	0.95	0.97	0.93	0.98	0.99	0.93	0.98	0.99	466	980	2305	1.49	4.56	11.44	1.00	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH05AD	0.93	0.98	0.99	0.88	0.96	0.98	0.93	0.98	0.99	0.94	0.98	0.99	466	980	2305	1.49	4.57	11.46	0.99	1.00	1.00	0.97	1.00	1.00	0.00	0.00	0.00
GH05BB	0.90	0.96	0.98	0.83	0.93	0.96	0.90	0.96	0.98	0.92	0.97	0.99	360	676	1475	2.09	6.02	14.04	1.00	1.00	1.00	0.97	1.00	1.00	0.00	0.00	0.02
GH05BC	0.86	0.95	0.97	0.77	0.90	0.95	0.87	0.95	0.97	0.89	0.96	0.98	360	676	1475	2.04	5.95	13.85	1.00	1.00	1.00	0.96	1.00	1.00	0.00	0.00	0.02
GH05BD	0.87	0.95	0.97	0.78	0.91	0.95	0.87	0.95	0.97	0.89	0.96	0.98	360	676	1475	2.06	5.97	13.65	0.79	1.00	1.00	0.91	1.00	1.00	0.00	0.00	0.05
GH06AB	1.00	1.03	1.04	1.01	1.07	1.09	0.96	0.99	0.99	0.97	0.99	0.99	486	1023	2071	1.53	4.69	10.06	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH06AC	0.98	1.03	1.04	0.96	1.06	1.08	0.94	0.98	0.99	0.95	0.99	0.99	486	1023	2071	1.51	4.67	10.02	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH06AD	0.99	1.03	1.04	0.99	1.06	1.08	0.95	0.98	0.99	0.96	0.99	0.99	486	1018	2071	1.52	4.68	10.04	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH06BB	1.00	1.05	1.06	0.98	1.08	1.14	0.93	0.98	0.99	0.94	0.98	0.99	303	796	1711	2.03	6.10	18.18	0.93	1.00	1.00	0.97	1.00	1.00	0.00	0.00	0.02
GH06BC	0.96	1.04	1.06	0.92	1.07	1.12	0.90	0.97	0.98	0.92	0.98	0.99	303	796	1711	2.00	6.05	17.93	0.93	1.00	1.00	0.94	1.00	1.00	0.00	0.00	0.02
GH06BD	0.98	1.04	1.06	0.94	1.07	1.13	0.91	0.97	0.98	0.92	0.98	0.99	300	796	1711	2.01	6.07	17.93	0.71	1.00	1.00	0.90	1.00	1.00	0.00	0.00	0.03
GH07AB	0.92	0.95	0.96	0.86	0.93	0.95	0.95	0.98	0.99	0.96	0.99	0.99	487	1028	2078	1.41	4.33	9.28	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH07AC	0.90	0.95	0.96	0.83	0.92	0.94	0.93	0.98	0.99	0.94	0.98	0.99	487	1028	2078	1.39	4.31	9.23	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH07AD	0.91	0.95	0.96	0.85	0.93	0.95	0.94	0.98	0.99	0.95	0.98	0.99	487	1028	2078	1.39	4.32	9.25	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH07BB	0.88	0.93	0.95	0.80	0.91	0.94	0.91	0.97	0.98	0.93	0.98	0.99	306	797	1815	1.81	5.44	15.97	0.93	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH07BC	0.84	0.92	0.95	0.76	0.89	0.93	0.88	0.96	0.98	0.90	0.97	0.98	306	797	1815	1.77	5.36	15.70	0.93	1.00	1.00	0.98	1.00	1.00	0.00	0.00	0.00
GH07BD	0.85	0.93	0.95	0.78	0.89	0.93	0.88	0.96	0.98	0.90	0.97	0.98	306	797	1815	1.79	5.37	15.63	0.71	1.00	1.00	0.91	1.00	1.00	0.00	0.00	0.02
GH08AB	0.94	1.00	1.04	0.90	0.97	1.03	0.96	0.99	0.99	0.97	0.99	1.00	582	1056	1976	1.59	3.63	10.86	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH08AC	0.92	0.99	1.04	0.87	0.95	1.02	0.94	0.98	0.99	0.95	0.98	0.99	582	1056	1976	1.56	3.61	10.81	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH08AD	0.93	0.99	1.04	0.87	0.96	1.02	0.95	0.98	0.99	0.96	0.99	0.99	582	1056	1976	1.58	3.62	10.83	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH08BB	0.86	0.98	1.07	0.83	0.94	1.03	0.90	0.97	0.98	0.92	0.98	0.99	476	861	1917	1.59	4.92	11.36	1.00	1.00	1.00	0.97	1.00	1.00	0.00	0.00	0.02
GH08BC	0.84	0.97	1.06	0.80	0.93	1.02	0.87	0.96	0.98	0.90	0.97	0.98	476	861	1917	1.54	4.86	11.28	1.00	1.00	1.00	0.95	1.00	1.00	0.00	0.00	0.04
GH08BD	0.85	0.98	1.07	0.81	0.93	1.02	0.88	0.96	0.98	0.89	0.97	0.99	476	861	1917	1.56	4.88	11.27	0.85	1.00	1.00	0.93	1.00	1.00	0.00	0.00	0.03

Table B.4 cont. The more important statistics for *SLA*4 (variant of weighted-average). Robustness trials are yellow highlighted.

	D1: Final depletion 1+ pop			D1: Final depletion F pop			D8(0): Scaled Final 1+ pop size			D8(inc): Scaled Final 1+ pop size			D9: min mat fem pop level			D10:Relative increase 1+ pop			N9: Need satfn(20)			N9: Need satfn(100)			N12: Mean downstep		
	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%	5%	Median	96%
GH21AB	0.49	0.51	0.52	0.47	0.53	0.54	0.88	0.98	0.99	0.91	0.98	0.99	482	1017	2056	0.75	2.35	5.11	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH21AD	0.48	0.51	0.52	0.45	0.52	0.54	0.88	0.97	0.98	0.91	0.97	0.99	482	1017	2056	0.75	2.34	5.08	1.00	1.00	1.00	0.98	1.00	1.00	0.00	0.00	0.02
GH21BB	0.49	0.52	0.53	0.48	0.54	0.56	0.91	0.97	0.98	0.92	0.97	0.98	303	789	1796	1.00	3.05	9.39	0.92	1.00	1.00	0.98	1.00	1.00	0.00	0.00	0.00
GH21BD	0.48	0.52	0.53	0.46	0.53	0.55	0.89	0.96	0.98	0.90	0.97	0.98	303	789	1796	0.99	3.01	9.28	0.71	1.00	1.00	0.89	1.00	1.00	0.00	0.00	0.02
GH22AB	0.27	0.73	0.93	0.24	0.64	0.86	0.81	0.95	0.98	0.82	0.96	0.99	445	977	2056	0.68	3.00	7.58	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH22AD	0.26	0.72	0.92	0.23	0.63	0.85	0.76	0.94	0.97	0.77	0.95	0.98	445	977	2056	0.64	2.96	7.53	1.00	1.00	1.00	0.98	1.00	1.00	0.00	0.00	0.02
GH22BB	0.02	0.28	0.65	0.02	0.24	0.58	0.24	0.74	0.92	0.28	0.78	0.93	76	652	1640	0.12	1.53	5.22	0.92	1.00	1.00	0.78	1.00	1.00	0.00	0.00	0.09
GH22BD	0.01	0.25	0.64	0.01	0.20	0.56	0.22	0.65	0.90	0.25	0.69	0.91	58	634	1640	0.08	1.31	4.78	0.71	1.00	1.00	0.65	1.00	1.00	0.00	0.00	0.10
GH23AB	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.96	0.99	0.99	482	1017	2056	1.46	4.51	9.75	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH23AD	0.94	0.98	0.99	0.88	0.96	0.98	0.94	0.98	0.99	0.95	0.98	0.99	482	1017	2056	1.45	4.50	9.73	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH23BB	0.91	0.96	0.98	0.83	0.93	0.97	0.91	0.97	0.98	0.93	0.98	0.99	303	789	1796	1.88	5.67	16.59	1.00	1.00	1.00	0.96	1.00	1.00	0.00	0.00	0.01
GH23BD	0.88	0.96	0.98	0.79	0.92	0.96	0.88	0.96	0.98	0.90	0.97	0.98	303	789	1796	1.86	5.60	16.20	0.81	1.00	1.00	0.89	1.00	1.00	0.00	0.00	0.03
GH24AB	0.95	0.98	0.99	0.89	0.96	0.98	0.95	0.98	0.99	0.96	0.99	0.99	506	1036	2131	1.46	3.92	9.56	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH24AD	0.94	0.98	0.99	0.86	0.96	0.97	0.94	0.98	0.99	0.94	0.98	0.99	506	1036	2131	1.45	3.90	9.54	0.97	1.00	1.00	0.97	1.00	1.00	0.00	0.00	0.00
GH24BB	0.89	0.97	0.98	0.83	0.94	0.97	0.89	0.97	0.98	0.92	0.98	0.99	388	851	1857	1.70	4.81	12.91	1.00	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.01
GH24BD	0.86	0.96	0.98	0.77	0.92	0.96	0.87	0.96	0.98	0.88	0.97	0.98	388	851	1857	1.68	4.78	12.48	0.88	1.00	1.00	0.94	1.00	1.00	0.00	0.00	0.03
GH24CB	0.95	0.98	0.99	0.89	0.96	0.98	0.95	0.98	0.99	0.95	0.99	1.00	672	1203	2235	1.16	2.70	8.57	1.00	1.00	1.00	0.97	1.00	1.00	0.00	0.00	0.03
GH24CD	0.94	0.98	0.99	0.88	0.96	0.98	0.94	0.98	0.99	0.95	0.99	0.99	672	1203	2235	1.15	2.69	8.56	1.00	1.00	1.00	0.91	1.00	1.00	0.00	0.00	0.05
GH25DB	0.06	0.26	0.71	0.05	0.24	0.67	0.26	0.49	0.83	0.30	0.53	0.85	244	630	1698	0.95	1.52	2.36	0.92	1.00	1.00	0.54	0.95	1.00	0.00	0.03	0.11
GH25DD	0.05	0.21	0.65	0.05	0.19	0.59	0.21	0.39	0.77	0.24	0.43	0.79	217	607	1698	0.67	1.20	2.02	0.66	1.00	1.00	0.39	0.83	1.00	0.00	0.06	0.16
GH26AB	0.96	0.98	0.99	0.92	0.97	0.98	0.96	0.98	0.99	0.96	0.99	0.99	439	946	1799	1.84	4.87	12.77	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH26AD	0.95	0.98	0.99	0.90	0.96	0.98	0.95	0.98	0.99	0.95	0.99	0.99	439	946	1799	1.82	4.85	12.73	0.96	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH26BB	0.87	0.96	0.98	0.77	0.93	0.96	0.90	0.97	0.98	0.91	0.98	0.99	448	809	1335	1.94	5.30	12.02	1.00	1.00	1.00	0.98	1.00	1.00	0.00	0.00	0.01
GH26BD	0.84	0.96	0.97	0.72	0.92	0.96	0.85	0.96	0.98	0.88	0.97	0.98	448	809	1335	1.89	5.28	11.91	0.87	1.00	1.00	0.94	1.00	1.00	0.00	0.00	0.04
GH27AB	0.92	1.01	1.11	0.90	0.98	1.05	0.97	0.99	1.00	0.97	0.99	1.00	499	1025	2600	1.46	4.43	10.39	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH27AD	0.91	1.01	1.10	0.89	0.97	1.04	0.96	0.98	1.00	0.96	0.99	1.00	499	1025	2600	1.46	4.43	10.37	0.98	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH27BB	0.85	1.00	1.11	0.80	0.96	1.06	0.93	0.97	0.99	0.94	0.98	1.00	479	804	1501	1.92	5.76	12.86	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH27BD	0.84	1.00	1.10	0.79	0.95	1.05	0.91	0.96	0.99	0.92	0.97	0.99	479	804	1501	1.88	5.72	12.84	0.90	1.00	1.00	0.97	1.00	1.00	0.00	0.00	0.01
GH28AB	0.93	0.99	1.02	0.90	0.97	1.02	0.95	0.98	0.99	0.95	0.99	0.99	479	1063	2246	1.49	3.92	11.37	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00
GH28AD	0.92	0.99	1.02	0.88	0.96	1.02	0.93	0.98	0.99	0.94	0.99	0.99	479	1063	2246	1.48	3.91	11.34	1.00	1.00	1.00	0.99	1.00	1.00	0.00	0.00	0.00
GH28BB	0.89	0.97	1.02	0.82	0.93	1.01	0.92	0.97	0.98	0.93	0.98	0.99	369	868	1797	1.60	4.99	14.13	1.00	1.00	1.00	0.98	1.00	1.00	0.00	0.00	0.00
GH28BD	0.85	0.96	1.01	0.79	0.92	0.99	0.90	0.96	0.98	0.91	0.97	0.98	369	868	1797	1.56	4.95	13.76	0.92	1.00	1.00	0.95	1.00	1.00	0.00	0.00	0.02