

From: [Scott Allen Jackson](#)
To: [trulie Campbell](#)
Subject: Re: Molecular marker technologies
Date: Saturday, August 08, 2015 3:47:47 AM

On Aug 7, 2015, at 1:11 PM, Trulie Campbell <trulie32@gmail.com> wrote:

In your opinion, do you think we can speed up the breeding process any more using molecular markers or any other new technologies ie arrays, blups others?

Yes, our program here uses markers to do selections for traits without having to phenotype (seed trati, disease, etc.). In the public sector blups are still emerging, but pioneer uses a type of genomic selection in their programs (they treat each breeding population as its own training pop_n)

Is there anything faster/cheaper than gbs to generate molecular markers? If so can a seed company utilize it at low cost?

There are a lot of low cost options, once you make the up front machinery purchase. You can email rajeev varshney, they are purchasig an expensive genotyping system that will allow them to make tens of millions of SNPs per yr at a very low cost. The bigger issues is developing a seed chipping system for genotyping so you can genotype before you plant (both monsanto and pioneer have this, we sort of have one here).

Thank you! (Other questions may come to me, but this is all I can think of right now.)

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